FINAL EVALUATION OF

THE COMMUNITY AND CHILD HEALTH PROJECT

(511-0594)

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ACKNOWLEDGMENTS

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ABBREVIATIONS AND ACRONYMS

AEIPI	Integrated Management of Childhood Illnesses (also IMCI)
AID	U.S. Agency for International Development
ARI	Acute Respiratory Infection
Auxiliar	Nurse auxiliary (somewhat analogous to a licensed practical nurse in the U.S.)
Alcalde	Mayor of a municipality
BASICS	Basic Support for Institutionalizing Child Survival Project
CAI	Comite de Analysis de Información (local health committees)
CCH	Community and Child Health Project
CCI	Centro de Capacitación Integral (decentralized, district training centers)
CDC	U.S. Centers for Disease Control
CHW	Community Health worker (also RPS)
CS	Child Survival
CSW	Commercial sex worker
DILOS	Dirección Local de Salud (decentralized health oversight committee)
DDM	Data for Decision Making Project
DHS	Demographic and Health Survey (also ENDESA)
DPT3	Diphtheria/Pertussis/Tetanus; third booster (complete coverage)
EHP	Environmental and Health Project
ENDESA	Encuesta Nacional de Salud (also DHS)
EPI	Expanded Programme on Immunizations

ET	Evaluation Team (Sullivan, Maynard-Tucker, Crisosto, Bartlett)
GOB	Government of Bolivia
HMIS	Health Management Information System
IDB	Inter American Development Bank
IEC	Information, Education and Communication (community educational strategies)
IMCI	Integrated Management of Childhood Illnesses
JS	John Short, Inc.
MotherCare	Centrally funded project to reduce maternal mortality
MIS	Management Information System
MOH	Ministry of Health
Municipio	Municipality/ township (the lowest level of GOB administrative apparatus)
NGO	Non- Governmental Organization
OMNI	Opportunities for Micro-nutrient Interventions Project
ORS	Oral Rehydration Salts
PACD	Project Assistance Completion Date
PAHO	Pan American Health Organization
PCI	Project Concern International
PES	Plan Estratégica de Salud: Ministry of Health Strategic Plan
PHN	Population, Health and Nutrition (AID sector)
PIL	Project Implementation Letter
PL-480	Public Law 480; also the Bolivian agency charged with managing proceeds from the sale of PL-480 commodities

PMU	Project Management Unite
PROCOSI	Programa de Coordinación en Supervivencia Infantil (NGO child survival network organization
ProSalud	Local NGO respected for its quality urban care
RPS	Responsable Popular de Salud (also CHW)
SACOA	Local NGO working in family planning
SERVIR	Local NGO working in family planning
SIDA/ETS	AIDs/ Sexually Transmitted Diseases
SNIS	Servicio Nacional de Informacion en Salud (National Health Information System)
UDES	MOH Departmental Health Directorship
URO	Unidad de Rehidratación Oral (local rehydration stations)

EXECUTIVE SUMMARY

The Community and Child Health Project (CCH) is a ten-year bilateral project between USAID and the Government of Bolivia to promote sustainable community health. A grant was signed in October, 1988 and is now projected to end on December 31, 1998. The goal of the project is to improve family health throughout Bolivia; the project purpose is to improve the access, coverage, quality and sustainability of an integrated package of community and child health interventions and mobilize the demand for these services in selected rural areas.

The evaluation's Scope of Work was modified to help guide USAID/B and the GOB in the preparation of a new Health, Population and Nutrition program: by analyzing the changing political context of the GOB, especially decentralization and municipalization; by assessing the implications of USAID's re-engineering; and by assessing key elements in CCH project design, strategy selection, technical areas, management and results. The evaluation was conducted by a four-member consultant team from March 10 to April 10, 1998.

Fundamental changes have taken place in the Government of Bolivia and in USAID in the ten years of project life. In the GOB, decisions were taken regarding Decentralization and Popular Participation-- municipalization,-- initiatives, which for all their operational "growing pains," have changed the face of Bolivian society (and the way the project views itself and its goals.) USAID's re-engineering has had a similarly important influence on project implementation: perhaps the biggest change was the reformulation of project purpose, Amendment # 15, brought

about by the newly formulated USAID Strategic Objectives and Results package. Because the project encountered major difficulty adjusting to this re-formulation, outputs called for in Amendment # 15's End-of-Project Status will not be achieved.

The evaluation discusses a number of issues regarding project design. It ratifies the importance of working within the public sector, working at multiple layers of the MOH and focusing on rural areas. It suggests a substantial re-organization of priorities, concentrating at the bottom of the MOH structure. It notes CCH's unfortunate evolution into a near-autonomous entity separated from the MOH, and the establishment of much higher salary scales for CCH staff compared to the MOH. As a result, it highlights the doubtful sustainability of many project accomplishments, the lack of any transition plan and a use of activity indicators, rather than impact ones, in the management information system.

The evaluation discusses selected issues regarding strategy section, among them, the following:

- Providing support to the national immunization programs was important in achieving significant public health gains.

- Institutional capacity building is an appropriate strategy but must take into account a number of inherent weaknesses in the Bolivian health system.
- The complexities of integrated programming are discussed, with the implication being that the new project will likely require even more flexibility than the current one if the

project is to have an adequate response to district officials and mayors in defining their local health priorities.

- CCH has made substantial investments in training on which a new project should build.

- A new project is well positioned to develop new models of service delivery, though this has not been one of the strengths of the current project.

- CCH has made important contributions to health management information systems in the country; however, there are a number of issues which have not been dealt with adequately. The most important of these are the failure to analyze adequately the information gathered and a complacency with data known to be flawed.

- The project has made important advances in improving health through its support of health information, education and communication. However, the project appears to have had a relatively weak strategy for working with communities.

- One unexploited program strategy for a new project is that of operations research.

- Sustainability should become an integral element of all objectives in the new project, and not only an outcome but also a process.

- Decentralization of project structure and strategies should be the modus-operandi of a new project.

The evaluation discusses a number of technical issues, among them, the following:

- The CCH project has not addressed much attention to peri-natal and neonatal survival. The new project should work to define community-based interventions aimed at improving newborn survival.

- Building on CCH project successes, a new project should develop and evaluate strategies which can increase Bolivia's immunization coverage in a sustainable and effective way.

- CCH has recently added the component of Integrated Management of Childhood Illnesses (IMCI). The new project should maintain this approach.

- It is not clear that CCH's indicators in child growth monitoring are likely to have an impact on child nutrition. With decentralization, municipalization and community participation, this approach could be incorporated more into programming.
- The quality of CCH's intervention in iron sulfate supplementation is suspect. A new project should collaborate with technical experts to seek more effective means to promote adequate iron consumption by pregnant women. Similarly, Vitamin A supplementation has received some, but probably inadequate, attention in CCH.

- Late introduction of maternal and reproductive health activities to CCH has meant that neither high quality IEC nor much one-on-one counseling are evident in project-financed activities; a first "guess" made by the evaluators is that the this program component, a dramatically high need in rural Bolivia, has a long way to go before it can be said to be delivering a quality-controlled product.

- Summarizing widely divergent experiences, it seems that several “piggy-back” projects brought program richness to CCH; many did not. Integration of the learning of these piggy-backs was under-exploited.

- The water component filled a great need and is a highly sought-after intervention. CCH-built water systems seem to provide high-quality, uninterrupted service and a vehicle to achieve the kind of grass-roots effort that represents the best of development theory and practice.

- The current project has come in for criticism at times as “lacking focus.” While a new project must avoid becoming extended across too broad a range of technical areas, it should have some programmatic response to the most important public health needs of the rural Bolivian population, particularly malaria, tuberculosis and epidemiologic surveillance, and provide such assistance in an integrated and sustainable fashion.

The evaluation discusses issues regarding project management and implementation, among them: a crisis of leadership in the early years; some later efforts at strategic planning that somehow seems to have become locked in stone; the gradual withering away of value alignment in project staff; the issue of unreasonable CCH salaries; a lack of administrative agility; a low sense of team spirit; and complicated relationships with USAID and with the MOH.

The evaluation discusses project results. It finds that CCH reports hundreds of accomplishments; in fact, project staff spend much time "bean counting" and little time analyzing the quality of the data and taking effective decisions. The project has some bona-fide successes. Vaccination coverage is clearly up in project areas and up in the country as a whole, and child mortality indices have fallen dramatically as a result. Another success is the provision of safe water in selected villages. A third is that MOH staff are traveling more and providing services to segments of the population which were not served previously.

The evaluation discusses impact monitoring and concludes that a new project will have to do a better job than CCH has in conducting a professional base-line study, even if the effort has to be contracted out. Money and time must be set aside and solid data collected so that real causation can be determined in subsequent, "with/without, " quasi-experimental evaluations.

The evaluation discusses project budget and expenditures. The Life-of-Project budget for CCH is $33 million, $ 9 million from the GOB's Title-III Secretariat and $24 million from USAID. The CCH-managed budget has been significantly under-expended for much of the life of the project:

at no time did project expenditures ever reach more than 82% in any one year; in several years it was below 60%. Overall, yearly expenditure-to-budget efficiency is 69% not even taking into account a very poor year in 1995. The exception to this pattern has been expenditure of Title-III funds which (after some delays) were expended at 100% of budget.

Expenditure of CCH-managed funds by category is as follows: (1) Decentralization represents the largest single expenditure category at 46%, relatively on target compared to budget. (2) Administration comes next at 22%, somewhat over-expended compared to budget. (3) Vaccinations comes next at 16%, under-expended to budget. (4) Water and Sanitation represents 11% and was over-expended compared to its 5.5%. budget.

The evaluation identifies several key findings. First, Ministry of Health facilities in CCH areas (and likely elsewhere) suffer from low utilization due to problems with access by the rural population, low quality service, cultural barriers, few women in positions of leadership, poor motivation in MOH personnel and inadequate provision of medicines. Second, the CCH project has suffered from an unduly burdensome and unresponsive administrative structure. Centralized decision-making and control that may have been useful at one time are no longer appropriate.

The evaluation discusses important CCH successes, most of which are replicable in a future project. Among them are: functioning of an all-but-self-sufficient rotating fund for essential medicines; establishment of good departmental teams of rural educators; good educational methodology at the community level; the carrying out of decentralized training in one project

area and early, good training in Integrated Management of Child Illnesses in two other areas; good project relations with the MOH at the district and health post level; good relations with the new mayors and the decentralized municipal structure. It discusses innovative Management Information Systems, appropriately tied in to the National Information system; good staffing up of regional (departmental and district) CCH teams; appropriate resource utilization in the provision of motorcycles, cold-chain equipment, etc; acceptable training provided to nurse auxiliars and promoters; good innovation in the design of simplified administrative forms and procedures; in one area, a sterling example of water system follow-up; good pilot activities in the Agua Claro project.

The evaluation discusses a number of important CCH weaknesses. Among them are the following: the Reproductive Health add-on came too late to accomplish anything significant, as did the geographical expansion to eleven districts; quality of data in the MIS is quite low; few CCH-financed workshops have received meaningful follow-up; IEC staff have been insufficiently pro-active in searching out other important IEC actors such as UNICEF; CCH staff seem to have been largely uninvolved in providing technical (medical) supervision to MOH staff; there is little cross-sharing between CCH departments and much program fragmentation; there have been relatively few training events for nurse auxiliars and promoters; there have been relatively few activities directed at the community; there have been relatively few activities direct at nutrition. In some areas, there is a strained relationship between the CCH Department Head and the MOH; the project has demonstrated only sporadic outreach to NGOs and to the private sector; CCH Head Office staff suffer from a lack of vision regarding the role of *supervision*

capacitante and have not traveled with much frequency to areas of difficult access; there are relatively few examples of local (CCH) initiative, and slow staff responsiveness to incipient area emergencies; it is likely that many training events are still overly didactic; the learning from the Agua Claro project has not been adequately capitalized on; there has been no thought given to a phase out strategy.

There have been a large number of piggy-back projects that have accrued to CCH over the ten years. This piggy-back arrangement has brought a clear administrative convenience to USAID and to the Cooperating Agencies. However, it has added a considerable administrative burden. In a future project, the evaluation team would recommend that these relationships be more thoroughly integrated into the overall project and that the number of such arrangements be more carefully controlled.

Both in water and in Chagas, CCH activities filled a great need and could be continued in a less hands-on modality than the direct implementation of the current project.

The evaluation puts forward several recommendations. The current project should close as scheduled and a new project should begin to be designed. The new project goal and purpose should be similar to the current project. Strategies should be different and should emphasize real community participation, decentralization and municipal buy-in, and eventual sustainability. A number of new technical areas are recommended: IMCI; reproductive health and reduced maternal mortality; business management and training; water and sanitation; Chagas, malaria and tuberculosis. The new project's geographical scope should be reduced and cover no more than

seven districts. The MOH should be encouraged to fully staff district and department teams and implement several other pilot activities called for in the Minister's new Strategic Plan. Proposed roles and functions of new project staff are discussed at length.

RECOMMENDATIONS

Recommendation # 1: The CCH project should close

The CCH project should be allowed to expire as planned on Dec. 31, 1998. A majority of HQ staff should be let go in July. Senior CCH management should develop an aggressive program of outplacement for departing staff. A small core of essential headquarters staff should be kept on from July to December to close out the project. Field staff should be encouraged to remain during the period from July to December, during which time a new project will be developed.

The Evaluation Team makes the following recommendations regarding program "transition". Project areas in which CCH has been working for almost ten years which do not exhibit marked levels of poverty should be closed without delay. In project areas where the project has newly opened, the team judges there is not enough progress to merit a prolonged transition period; in these areas, too, the project should close quickly. The team recommends that several current program areas should continue to be included in the new project, based on criteria of high indices of poverty and the Ministry's new Strategic Plan.

Each CCH Department staff should submit a list to CCH- La Paz of what it thinks has been "promised" to communities and the validity of those commitments should be analyzed. If there are any contractual elements still pending, they should be handled before the project closes. The Evaluation Team made a strong recommendation that CCH retain a lawyer specialized in the

Bolivian labor code. The evaluators also propose that a detailed list of Fixed Assets be updated and that some of this equipment be transferred to the departments the project is leaving, and some be transferred to departments where the new project will be starting up. This is also true of project vehicles.

One issue on which the ET does not make a recommendation but rather simply an observation is that it might be worthwhile to consider the hiring of a "Transition Manager," someone outside the current project to work under a fixed-service contract with no possibility of continuing on in the new project. The team is firm in its recommendation that this responsibility not be assigned to anyone currently on the CCH payroll.

Recommendation # 2: A new project should be developed.

A new project should begin to be developed, drawing on the successes of CCH but structured significantly differently. The project should be located organizationally within the Ministry of Health as the issue of "parallel structure" must be avoided from the outset. It should carry a Spanish title. The new project should be implemented with a decentralized staffing pattern: no more than four senior staff in the La Paz Headquarters supported by minimal administrative staff. The majority of staff should be located at the departmental and district/ municipal level. A tentative configuration would be one senior physician as Regional Director, and three assistants, one for Education, one for Administration and one for MIS. Reporting to the departmental staff would be district teams, composed of a financial administrator, an MIS secretary/ receptionist

and support staff. The major addition to the new project would be the hiring of community educators for each of the municipalities in which the new project will work.

The second key proposal is that the salary structure within the new project must reflect the local market; a fair salary system should be put in place before an unreasonable one irredeemably distorts the new project as it did CCH. The evaluation team recommends that a salary commission be established to determine the level of remuneration for the senior management team of the new project, composed of representatives of a Bolivian labor market consulting firm, a representative of the MOH and two senior representatives of local NGOs. The purpose of the commission would be to develop a fair and equitable salary structure and define a salary policy which will not distort the market as the CCH structure did, while at the same time providing a broad consensus on what level of remuneration will be required to attract and retain competent local staff.

Recommendation # 3: Project Goals and Purpose

The goal of the new project should remain the same: to improve the health of the Bolivian population. The project purpose does not need modification and fits within the Intermediate Results package of USAID: improved child survival, reproductive and sexual health practices; improved quality and increased coverage of community health care by local governments; and decentralized and participatory health care systems.

Recommendation # 4: Project Strategies

The evaluators propose that project strategies should be considerably different. The first strategy would be to foster real "community participation." The second strategy would be that of decentralization. A third strategy would be to foster municipality buy-in, thereby aiming at eventual sustainability. To that end, the team is recommending that the new project's involvement with any one municipality be no more than five years and that the fifth year of project activities be a year of consolidation rather than the introduction of new add-ons.

Recommendation # 5: Project Activities

Many project activities will remain largely unchanged. The evaluators recommend that the new project invest considerable staff time in preparing course work to upgrade skills of the nurse auxiliars and community promoters; also, that significant time be spent with MOH district and municipal staff, upgrading management skills and culturally appropriate working styles, serving as interface between MOH and municipal leaders, coordinating outreach and community development activities.

Recommendation # 6: Technical Areas

The evaluators propose that the technical areas for which the new project should become involved should be increased to represent (as much as possible) the full range of medical services required by the rural population. All activities and focus of the IMCI program should be

retained: i.e., integrated attention to the child, including full vaccination regimes, etc. The evaluators recommend that the new project move vigorously into Reproductive and Sexual Health with a re-invigorated focus on maternal health. The next area of technical focus should be business management and training; this applies equally to MOH staff in the hospitals and health posts as it does to the municipalities. Another area that the project should undertake is that of water programming. The Evaluation Team envisages that the role of the new project in this area would be in "pre-investment" (i.e., prior to construction) proposal preparation. Another area that the project should undertake is that of preparing a response to the infectious diseases problems in project areas, particularly Chagas, malaria and tuberculosis.

The new project should continue to have strong element of capacity building, particularly for the nurse auxiliars and community organizations, and continue to provide support for key operational and activity costs, such as training and local health committees meetings.

Recommendation # 7: Geographical Focus

The evaluation team recommends that the project should work in fewer areas than 11 districts, either by scaling back at the very least to three districts per department, (preferably two) or by scaling back to two departments. The issue of "geographical contiguity" can be studied. Whether such geographical contiguity can be achieved by including the three districts which the team is recommending to be continued, is a subject to be analyzed by the new proposal write-up team. The evaluation team recommends that priority be given to the new project's working in areas

where the MOH is not competing with other health delivery organizations, in the concept of "multiple providers" which the new Minister of Health is promoting.

Recommendation # 8: Ministry of Health Contribution

The evaluation team recommends that the Ministry commit to filling all unfilled MOH slots at the district and health post levels in project areas within a specified time period, and that Año de Provincia physicians should not be assigned to new project areas. Instead the Ministry should commit to hiring "medicos familiares" in these project areas. The evaluators recommend that the term of services for these doctors be at least three years. In addition, the MOH should commit to studying on a pilot basis, the establishment of a "career ladder" for nurse auxiliars in project areas.

Recommendation # 9: Roles and Functions of New Project Staff

The evaluators recommend that the role of the new project's Executive Director should be to provide leadership and vision to the project, to liaise with the Ministry of Health and keep the project up-to-date on developments in the MOH, to provide direction and boundaries to project staff, to empower subordinate staff in a decentralized model, and to interface with USAID. The roles of the Assistant Directors should be to provide technical assistance, guidance and orientation to the Regional Directors; to provide oversight and leadership in technical areas; to ensure that adequate cross-fertilization and cross-departmental learning takes place; and to

supervise decentralized accountability. An Assistant Director for Programs would have overall responsibility for the technical/medical aspects of the project; the Controller would exercise oversight of the departmental accounting staff who will have actual responsibility for the day-to-day financial operations of the project; and the Assistant Director Evaluation/ MIS would have oversight of the management information system and the assessment of the impact of project interventions.

At the departmental level, the evaluators recommend a change of title, from "head" of the regional team to "Regional Director" in a deliberate effort to reinforce the concept that line responsibility in the new project will reside at the regional level. The evaluation team recommends that a macro-level contract be signed with the MOH at the central level, and that implementation contracts be signed at the Departmental level in a model used successfully by Bolivian NGOs. Each Regional Director will be fully responsible (within project norms) for his/her operations: for staffing decision, budget preparation, all aspects of project implementation, reporting, liaison with Departmental staff, etc.

The evaluators recommend that the regional technical team be responsible for the implementation of project activities at the district and municipal level. A regional educator should be responsible for planning and assisting in the implementation of training courses for the nurse auxiliars and community health promoters in health subjects, and for the management and administrative training for municipal and MOH field staff. The regional administrator should be responsible for all aspects of financial management: regional budget preparation, local

bank account control, monthly budget control and reporting, check writing, etc. The regional MIS individual should be responsible for the quality and integrity of the health management system, oversight, control of data, and effective use of the information by the district team and local municipal authorities.

The evaluators recommend that the roles of the municipal educators should be to liaise with the MOH physicians and nurse auxiliars on a day-to-day basis; to help them understand the importance of community outreach and plan community activities; to inculcate in them cultural and gender sensitivity; carry out local level course work on important health themes; liaise with the mayor and the municipal health committees; travel to outlying communities in the company of MOH staff and on his/her own; creating demand for better health services.

1. INTRODUCTION

The Community and Child Health Project, CCH, is a ten-year bilateral project financed by USAID and the Government of Bolivia (GOB) to promote sustainable community health activities in rural Bolivia. An original five-year grant was signed in October, 1988; the grant was amended several times and is now projected to end on December 31, 1998.

The goal of the project as most recently amended is to improve family health throughout Bolivia. The Project Purpose is to improve the access, coverage, quality and sustainability of an integrated package of community and child health interventions and to mobilize demand for these services in selected rural areas.

The project has been evaluated several times. First was a midterm evaluation in January, 1992 (Becht, et. al.). The project was again evaluated as part of a sector review undertaken by USAID (Bartlett/ Anderson) in 1993. An "Institutional Diagnosis" was conducted on the project in 1996 (Fairbanks). The current document represents the findings of a four-member evaluation team which visited Bolivia from March 14 to April 10, 1998 to conduct a Final Evaluation of the project, and provide suggestions to USAID and to the Ministry of Health regarding the structure and content of a potential follow-on project.

The official Scope of Work is presented as an Appendix A. Prior to the team's departure to Bolivia, a compressed SOW was drawn up and presented to and accepted by USAID in the team presentation meeting. That document proposed the following:

- To help guide USAID/B and the GOB in the preparation of a new Health, Population and Nutrition activities and/or a new HPN program by:

- Analyzing the changing political and economic context of the GOB, especially decentralization and municipalization and new roles for the Ministry of Health;

- Assessing the implications of USAID's re-engineering and likely future staffing patterns; and by

- Assessing key elements in the history of the CCH project: in project design, assumptions and indicators; in strategy selection; in technical areas; in management and implementation; and in outputs, outcomes and results.

At USAID's request, the evaluators accepted the challenge of directing thirty percent of the evaluation looking back at the CCH project experiences, and seventy percent looking forward to a follow-on project. That orientation shapes the entire report.

The structure of the report is as follows. An Introduction, now concluded, sets the broad context of the document, followed by a page describing the Methodology. Two following sections describe the history of the project, one from an administrative slant, the other from a programmatic one. A section follows on the current health and human development situation of the country. Two additional sections describe other contextual elements: changes in the Bolivian government especially decentralization, and changes in USAID especially re-engineering. The main body of the report contains five sections describing the CCH project: design, strategy selection, technical issues, management and implementation issues, and outcome and impact issues. The report describes key findings. It concludes with a list of nine recommendations.

2.0 METHODOLOGY

Introduction

The evaluation of the CCH project was conducted by a POPTECH team of three expatriate consultants and one Bolivian consultant during a four week period from March 10 to April 10, 1998. The expatriate team members spent their first week in the POPTECH office in Arlington, Va. to develop a team working plan, develop interview instruments, prepare the modified Scope of Work and conduct interviews with key informants within USAID and the Washington, DC cooperating agency community. Weeks Two through Five were spent in-country, as described below. Weeks Six and Seven were spent in the preparation of this report.

Team Planning Meeting

A team planning process adapted a step-by-step approach developed by WASH that allows team members to understand and shape the final product. These steps were (1) Introduction to the program; (2) History of the grant and current status; (3) Chief clients for the report; (4) Scope of Work; (5) The End product of the review; (6) Team members; (7) Developing a work plan; (8) Developing instruments; (9) Administrative details. This exercise created in each team member a similar frame of reference into which the Bolivian team member was integrated before the start of interviews in Week Two.

Review of Documents

Numerous documents were reviewed by the Evaluation team; the complete list is presented in Appendix G. Since the project is such a long-running activity, more team attention was given to recent documentation rather than to early history. There were two exceptions. A mid-term evaluation conducted by Becht, et. al. in 1992 received considerable scrutiny. A Health Sector Review conducted by Bartlett and Anderson in 1993 was also referred to with some frequency. A well put together Project Summary written by the CCH staff in preparation for the Evaluation Team's (ET) arrival put into one place an up-to-date summary of project activities.

Interviews

A large number of interviews were conducted as part of this evaluation, over two hundred in total. Chief groups interviewed were USAID Washington staff, USAID/ Bolivia staff, CCH staff members, representatives of the Bolivia NGO and Cooperating Agency sector, Ministry of Health staff at all levels, health personnel of the communities and beneficiaries. Some interviews were conducted one-on-one for approximately one to two hours; others were conducted in group and lasted approximately one hour. Focus groups with auxiliars (male and female), village women and project participants usually took about two hours. An Appendix lists most of those interviewed.

Field Travel

In Bolivia, the Chief of Party traveled one-third of his time (9 of 27 days) in the field, while two other full-time team members spent half of their time in the field.[1] This considerable expenditure of team effort was a recognition that one of the primary client groups that the team needed to hear from was the rural Bolivian populace. With the exception of the first trip (where all four team members traveled together), two team members traveled together to each of the three Departments, La Paz, Santa Cruz and Cochabamba, allowing one member to focus on institutional interviews while the other conducted community discussions and/or focus groups. The Chief of Party was able to travel to the three regions to develop an overall "feel" for project accomplishments. The full field travel schedule is presented in Appendix B. In retrospect, the team feels that this investment of time was an appropriate decision: the enrichment provided to the final product by these interviews was invaluable. The team also wished to express its appreciation for the effort of the CCH team in making this heavy field travel possible.

[1] One of the team members, Dr. Al Bartlett of USAID/Washington (also one of the authors of the Sector assessment), was only able to be with the team for the first ten days of its Bolivia stay.

3.0 HISTORICAL BACKGROUND

Throughout its almost ten year existence, the Community and Child Health Project has been subjected to changes within and outside the project in processes which usually have not been completely benign. As described below, the early days were characterized by a vacuum of leadership which set a tone that continues to the present. In its mid- period, the project practically came to a standstill when the USAID project manager and the CCH Executive Director were engaged in a struggle over whether to change the project's orientation, and if so, how. In addition, each change of government has contributed to a change of vision, and project staff report seven changes of Minister of Health, three changes of Executive Director and 30 changes of MOH Department heads.

As defined by project staff, on a year-by-year basis the most important elements of program evolution were:

1988: The project received funding and started up. The original five year grant was financed for $16.5 million from USAID and $5.5 million from the GOB via the Title-III Secretariate.

1989: Introduction of integrated health activities: water and sanitation, district development, administration and finance, along with financial support to the national diarrheal disease /cholera plan, and the National Immunizations Program. Hiring of the institutional

contractor, John Short, Inc., to run the project. Arrival of Technical Coordinator on secondment from CDC Atlanta. Seventy four percent expenditure compared to budget.

1990: Start-up of health activities in four districts: in the Altiplano Valle Sur (La Paz), Carrasco Valle and Chapare Valle Puna (Cochabamba) and Valles Crucenos (Santa Cruz). Establishment of sub-contracts for the construction of water and sanitation systems, and expansion of the original grant to include major activities to confront the Chagas epidemic. Budgetary support increased with new funding by USAID and PL-480 of $1.2 and $2.5 million dollars respectively. In addition, four baseline studies were conducted: Samaipata (Santa Cruz), Totora and Sacaba (Cochabamba) and Ayo Ayo (La Paz). Findings revealed women's low attendance at prenatal controls and MOH-assisted deliveries, low immunizations coverage and a high percentage of diarrhea and respiratory infections among children under 5 years old. Sixty- eight percent expenditure compared to budget.

1991: First year of implementation of a four-year effort to combat Chagas in the departments of Cochabamba, Chuquisaca and Tarija. Incorporation of a fifth district, Chiquitania Sur (Santa Cruz) into mainline project activities. Cholera broke out in August of that year, confirming the project's original focus on diarrhea; and through 1992, the project developed investigations and a training program that targeted and strengthened the Department of Entero-bacteriology in the National Institute of Health. Also, a strong working relationship was developed with the Centers for Disease Prevention and Control

(CDC) in Atlanta. A second phase of the water and sanitation component was implemented along with a baseline study for Chagas related activities. In December a mid-term evaluation of the project was conducted which identified a number of serious institutional, operational and technical weaknesses Fifty-four percent expenditure compared to budget.

1992: Signature of Amendment No 9, a significant adjustment in the original grant's conceptual framework, extending the project until 1995 and revising project goals toward "improving family health throughout Bolivia through contributing to the decrease of infant and maternal mortality and morbidity." Emphasis was placed on interventions in health and in child survival and the development of institutional and community participation in five newly articulated components: (1) the control of diarrheal diseases/cholera; (2) immunization; (3) district development; (4) control of the Chagas disease; (5) water and sanitation. Two million dollars was added to the project budget. Initiation of the "Data for Decision Making Project." Incorporation of the district of Capinota (Cochabamba) into project activities. Termination of the contract with John Short. Eighty-two percent expenditure compared to budget.

1993: In response to a USAID/B Health sector assessment (which also looked at CCH), the project's educational strategies were modified; and a revised program in health education started. Sixty-seven water systems were finished this year, and a campaign of house improvement for control against Chagas was undertaken. A base line survey was carried

out in Chiquitanía Sur and Capinota districts, along with operations research in reproductive health in Capinota funded by the Population Council and MotherCare. Departure of first USAID project manager, nomination of an interim replacement. Eighty-one percent expenditure compared to budget.

1994: Conclusions of the Chagas and water and sanitation components as well as the first phase of the Data for Decision Making Project. Technical assistance for development of a computerized package for the financial and accounting control provided to Secretaría Nacionál in twelve regional offices. Addition of a Project Implementation Letter (PIL) for activities directed to AIDs and Sexually Transmitted Diseases (STDs). Seventy four percent expenditure compared to budget. Arrival of second USAID project manager.

1995: Bitterly fought re-organization of the project's purpose statements as represented by Amendment # 15 (to be discussed below): "to improve access, coverage and sustainability and to mobilize demand for such services." Operational plan was rewritten 15 times; project to all intents and purposes paralyzed for this year. Increase in funding of $7 million; project termination date extended to to July 1998. During this year, the "Public Participation" law was promulgated by the GOB, a major shift of political power. Addition of the districts of Chapare Tropical (Cochabamba), Los Andes-Manco Kapac and Yungas (La Paz), Chiquitanía Centro and Chiquitanía Norte (Santa Cruz). Thirty-eight percent expenditure compared to budget.

1996: Related to the new GOB municipalization efforts, the project embarked on administrative decentralization: creation of the regional offices in La Paz, Cochabamba and Santa Cruz. A number of new program activities were introduced: a “Social Marketing" component; Reproductive Health activities in the Department of Santa Cruz; “Atención Integral de Enfermedades Prevalentes en la Infancia" (AIEPI); the project *Agua Claro*; and “Participatory Community Interventions” with EHP. Substitution of the district Los Andes-Manco Kapac for Suches. Incorporation of the district of the Altiplano Valle Norte (La Paz). Expansion to eleven districts. Carrying out of base line studies in the districts of Altiplano Valle Norte and Yungas Sur (La Paz), Chiquitanía Norte and Chiquitanía Sur (Santa Cruz) and Chapare Tropical (Cochabamba.) Departure of second USAID project manager; arrival of current one. Departure of first Executive Director. Fifty-seven percent expenditure compared to budget.

1997: Continued decentralization of CCH administrative structures. Project running in all components. Seventy-seven percent expenditure compared to budget. Departure of second Executive Director.

1998: Through PIL No. 49, the project was extended until December 1998. Arrival of third Executive Director. Carrying out of the Final Evaluation. Start of project close-out.

4.0 CONTEXTUAL CHANGES

Within the ten years of the CCH project, several fundamental changes have taken place in the Government of Bolivia and in USAID. Within the GOB, decisions were taken regarding "Decentralization" and the "Law of Popular Participation", or municipalization. Within USAID, the re-engineering campaign of Vice-President Al Gore has come to fruition. Both these structural changes have had a significant influence on the project. A related issue, the formulation of USAID's Strategic Objective and its impact on CCH's goal and purpose statements, will also be discussed.

4.1 Decentralization

Until 1995, changes in the Health sector were related to the "typical" changes in priority setting occasioned when a new Minister was appointed or a new government elected. In Bolivia, this frequently involves changes in MOH personnel through the entire system, even as far down in the structure as the health posts. Any long-term project in Bolivia must factor such changes into its plans.

In 1995 however, Bolivia embarked on an ambitious, perhaps even unprecedented, campaign to decentralize authority. Two laws were passed in that year, the "Law of Popular Participation" and the "Law of Administrative Decentralization" which delegated responsibilities of the central government to 311 municipalities, along with the transfer of certain financial resources. Under

these laws, municipal governments elected by local constituents are now charged to oversee all development activities in their respective jurisdictions. Financial resources are transferred from the center to the periphery on a per capita basis: populous municipalities are assigned more resources than less populous ones. Within certain minimums, each municipality has the freedom to prioritize the assigning of its resources to Health, to Education and to Sports as it sees fit. In the opinion of the Evaluation Team, this is as fundamental a "re-making" in the way government is structured in Bolivia as anything since the Paz Estensoro revolution of 1952.

As a result of these developments, the MOH health structure has also had to change, since (among other things) part of the previously centralized health budget is now devolved to local control. Supreme Decree 24237 established the creation of Departmental Health Directorships, now called UDES, to which was assigned the role of managing the process of applying health policies. Also created were Local Vigilance Committees and Local Directory of Health (DILOS) to serve as liaison and linkage between the local mayors and the MOH in its normative and technical roles.

The DILOS is constituted with three members: the mayor of the municipality or his representative, a member of the MOH departmental structure (usually the director of the local hospital) and one member of the community (usually a member of the Local Vigilance Committee.) This structure is meant to create tripartite responsibility: among the municipality which contributes the physical infrastructure, equipment and local revenue; the local Ministry representative who contributes personnel, technical oversight, training and central level co-

financing; and the community which should bring local "voice" to decision-making, and report on their satisfaction with local health accomplishments. Each municipality is responsible for preparing an Annual Operating Plan and each DILOS is responsible for including health objectives in that plan. To give an idea of the profound changes this process implies, a case in point is the cadre of nurse auxiliars, who are still supervised in technical realms by the MOH and by the UDES who are now paid by the Municipalities and responsible to the local DILOS. This structure, somewhat complicated as it is, is meant to strengthen grass-roots accountability and local span-of-control.

The CCH response to these developments received mixed reviews. In some quarters, CCH was reported to have been in the vanguard, recognizing the importance of these new laws and interacting with the new municipality structure quickly and with vigor. One informant said that CCH "set the pattern" of external entities willing to sit at the negotiating table with the *alcalde* to develop co-financing possibilities. Other interviewees indicated that CCH central office staff were slow to implement the required (project) administrative decentralization.

If conceptually one can applaud Bolivia for its vision and courage in moving the country into such unchartered waters, operationally this four year process has not been a one-way street of easy successes. First and foremost, in a country with a long history of centralized structures and strong caudillismo, finding capable local administrators has been a problem.

- There has been some outright misuse of funds: eleven municipalities have had their funds frozen by the National Treasury while financial improprieties are being investigated (though one could argue that financial mismanagement in only 11 of 311 municipalities is a dramatic success.)

- There have been a number of ill-advised financial decisions and a tendency to invest the first local resources in "cosmetic" projects. In one of the poorest municipalities, the Evaluation Team saw that the first municipal priority had been to build a luxurious soccer field, followed shortly thereafter by a "white elephant" hospital, while the local populace continues to live in miserable conditions. However, it can also be argued that such decision-making in an inevitable part of the "learning curve" of true democracy.

- In some municipalities, there has been an overly-frequent change of mayor (the law having given the populace a referendum/ recall possibility at the end of each year); and several CCH-support municipalities have had a new mayor each year for the last four.

Finally, one could argue that the assigning resources on a strictly per capita basis discriminates against areas of endemic poverty, such as the north of Potosí, Capinota or Pacajes where outward migration has been fierce for many years, and unduly favors the agriculturally more prosperous land of Santa Cruz toward which this migration has been directed.

These weaknesses being admitted, the evaluators were reasonably impressed with the quality of personnel they encountered in the various Municipalities visited. In some places, newly elected mayors are juggling competing political cross-currents; in others, the leadership comes from the upper-middle class of a nearby city or has assumed postures of arrogance at its newfound authority. In some, though, the team was gratified to find energetic, visionary leaders (in the fullest sense of the term) taking the reigns of government and making insightful, long-term, effective decisions regarding the future of their townships.

For all its operational "growing pains," decentralization has changed the face of Bolivia's political economy. The general consensus of those interviewed by the ET is that there will be no turning back the clock on this process. International donors are firmly supportive of these initiatives, and the newly elected government of General Hugo Banzer appears to be supportive also. Paraphrasing the words of theVice-Minister of Popular Participation, Lic. René Mostajo, who gave an interview to one of the ET members, "the current government is conscious of the need to consolidate the process of popular participation as a policy of the State, and the efforts of this Vice Ministry are oriented to the strengthening and reorganization of the local Vigilance committees and to link that reorganization to processes which generate a greater resource flow and local investment."

4.2 Re-Engineering at USAID

The other major change in the macro-context which affected the implementation of CCH in unanticipated ways was the re-engineering effort of the US government and its implications on the functioning of USAID/ Bolivia. A brief commentary on these developments will suffice, since the principle audience for this report is USAID which knows all there is to know about the primary (and secondary) effects of the process.

Suffice it to say that re-engineering brought with it a radically new way of looking at USAID/B's business. During the process, a number of difficult moments had to be worked through. One was that USAID/B had to engage in a downsizing effort of some significance. Changes in the USAID/B milieu clearly would have had an indirect effect on the project.

Second, formulation of the Strategic Objectives statements and the Intermediate Results package (to be discussed shortly) clearly took an extraordinary amount of staff time. The ET is favorably impressed with the congruence between the Strategic Objective statements and the goal formulation of CCH (one predating the other by several years); however, this is not to imply that such congruence was achieved easily. One comment, in fact, from a USAID staff person indicates that re-engineering continues to extract a cost on the Mission's ability to provide technical supervision to projects like CCH. Evidently USAID still invests considerable staff time and energy in strategic team building, cross-discipline meetings and strategic objective formulations.

4.3 Goal Formulation

Adapting the CCH project goal formulation to the new USAID Strategic Objectives caused a major crisis in the project.

The original project goal (1988) was “to improve the health status of the rural population.” Amendment #9 (1992) modified that statement to read “to improve family health throughout Bolivia” and Amendment # 15 (1995) maintained that formulation. There seems little enough to argue between the two statements.

Project purposes changed more substantially in the three formulations.

- In the original grant, the purpose was “to reduce child morbidity and mortality” through the triple strategies of interventions in child survival, institutional development and community participation.

- Amendment # 9's purpose was similar; “to contribute to the reduction of infant, child and maternal mortality and morbidity” (though note addition of the word “maternal”) through a five-pronged strategy: (1) diarrheal disease/ cholera control; (2) immunizations; (3) district development; (4) Chagas disease control; and (5) water and sanitation.

- Amendment # 15's purpose was different, but (from the ET’s perspective) not substantively so: “to improve the access, coverage and sustainability of an integrated package of essential community and child health interventions; and mobilize the demand

for these services in selected areas" to be accomplished through health interventions, institutional development and community participation. It will be seen that access and coverage are criteria in the USAID Mission strategic objective.

Perhaps one sticking point was issue of sustainability. As called for in Amendment # 15, "sustainability ... is an integral element of all project objectives... [and] is not only an outcome but also a process aimed at mobilizing and supporting conditions that guarantee long-term provision of health care...[It is] more than sound financial and administrative practices at local levels. It also entails the development of institutional coalitions or networks among collaborating institutions with different functions." (English text) By its completion date the project aimed "to have achieved the installation or improvement of public, private and NGO health centers in each district which provide services conformed to technical and administratively uniform norms which will guarantee their permanence in the rural health areas." (Translation from the Spanish text which is different in nuance from the English one.)

To the Evaluation Team, it appears that Amendment # 15 was a radical departure from the original project formulation, requiring CCH to institutionalize all of its activities in the last three years of its existence. In the judgement of the evaluators, it is doubtful whether any project could reverse its course as fundamentally as CCH was required to in Amendment # 15 in as short a time as three years. Perhaps this was the source of conflict between the USAID project manager and the CCH Executive Director; in the end, the conflict cost both of them their jobs. But the problem wasn't resolved when the two individuals departed. When the CCH team presented to

the evaluators its description of project status in March, none of the CCH briefings were directed to Amendment # 15's formulation of project purpose. Instead, they were directed to the achievement of certain levels of project *activities*, rather than institutionalization. Thus the End-of-Project-Status and outputs called for in that document will not be achieved in any significant degree.

To conclude this (somewhat arcane) section, it is only necessary to make reference to the Strategic Objective as formulated by USAID/B. That document's strategic objective is "improved health of the Bolivia population." The Intermediate Results are (1) "improved child survival and reproductive and sexual health practices by Bolivian men, women and boy and girl adolescents and children; (2) improved quality and increased coverage of community health care established by local governments and NGOs; (3) decentralized and participatory health care systems." These results are in complete agreement with what the CCH project should be doing: the conflict caused by Amendment # 15 does not seem to have been necessary.

5.0 THE COMMUNITY AND CHILD HEALTH PROJECT

This section will look at issues of project design, strategy selection, technical areas, management issues and results. There is some inevitable overlap between design, strategy and technical choice selection for which the reader's indulgence is requested.

5.1 Project Design, Assumptions, and Indicators

We have chosen to analyze seven issues as they related to the original design choices: working with the public sector; working at multiple levels of the Ministry of Health; focusing on rural areas; the "semi-autonomy" of CCH within the MOH; salary levels in CCH; and the sustainability of project interventions.

5.1.1 Working with the Public Sector

One key element in the original design of the CCH project was a desire to work within the structures of the GOB health system, as one element of USAID's strategic portfolio that included other funding arrangements working with NGOs and private sector entities. Review of CCH experience indicates that this relationship with the public sector has given USAID a valuable voice at the GOB central level, which in turn has contributed to policy development in such areas as control of diarrheal diseases, cholera and integrated management of childhood illness. For instance, several interviewees report that the commodity inputs of USAID to the national

Diarrheal Diseases/Cholera and Immunization programs in the past have been key contributions to increased coverage and resultant impact in infant and child mortality reduction. CCH has functioned as the "umbrella" under which such assistance has been programmed.

The Team judges that it is appropriate for USAID/Bolivia to maintain a public sector component in its PHN portfolio and that USAID/B proceed with its plan to develop a Strategic Objective Agreement with the Government of Bolivia. There is a downside to such involvement, however. As described elsewhere, the project has lived through seven changes of Minister, 30 changes of Departmental directors and three changes of (MOH-appointed) Executive Director. Substantial proportions of project momentum/ public sector investment can be lost when there are major changes in counterparts and policies which frequently accompany changes of government. One of the observations of CCH staff is that the project has, indeed, suffered from frequent changes of vision and purpose as a result of such shuffles.

5.1.2 Working at multiple levels of the public health system.

The CCH Project was designed to provide inputs and personnel at three levels of the public health system, the national, departmental and district levels. The Evaluation Team's analysis indicates that working at these three levels was appropriate. However, review of the CCH experience indicates a need for substantial adjustments of the structure and modes of operation at each level.

Based on perhaps then-valid criteria, the project was designed in a highly centralized fashion with strong central control. The project was originally staffed with only a handful of La Paz staff . Over the course of the years, however, a major expansion of staff took place and the number of personnel at the central level has ballooned: at present, the supervisory payroll is approximately 45 people, --- in support of 55 field people. Moreover, despite the dramatic structural and functional decentralization of the GOB's own approach, the CCH project has been slow to decentralize itself: in fact, the central authority of the project has not diminished, and probably has increased. A simple institutional and functional analysis demonstrates that the present centralized structure and project operations are inconsistent with supporting improved health in Bolivia through a decentralized approach. A new project must correct this design issue.

The original project design apparently assumed that central level technical staff would provide substantial "value added" to the project's overall work. As will be described elsewhere, the Evaluation Team finds the project has central staff with strong credentials, but that these staff are not providing the project or national programs with critical analysis, quality control of the project's technical work, strategic approaches or systematic evaluation of project experience that could inform broader programming and policy.

CCH roles and functions at the departmental level have shown mixed results. Even in the best of cases, they seem primarily to involve liaison functions and not a side-by-side working relationship nor strengthening of department level capabilities to support effective implementation, supervision and technical quality at district and municipal levels. Given the

substantial responsibilities given to the departments in these areas by the decentralization process, the potential role of a new USAID/GOB project to strengthen key elements of departmental capacity and function should be seriously explored.

The original project design did not speak much to operations at the district level. In fact, several interviewees highlighted that the original project documentation spent a lot of time discussing input provision, and almost no discussion of community participation. Notwithstanding, the administrative devolution CCH effected in response to decentralization appears to have been generally effective. Improvement in some district-level management has taken place and organizational improvement can be noted in some districts. The continuous presence of health educators at the district level has helped demonstrate to district authorities the utility of Information/ Education/ Communication (IEC) and social mobilization in public health. In addition, although the project was slow to develop community-oriented approaches during its early years (except in the water component), during the past two years CCH and its district partners have responded to the *Ley de Participación Popular* by developing more approaches in community education and mobilization.

CCH's district-level activities are not without flaws. One is the difference between CCH being perceived generally as the provider of inputs, versus a more strategic role in improving access, use and quality of key interventions at the municipal and community level. Field visits found that this lack of a systematic approach has resulted in substantial variability of inputs within and among districts: some sites have received equipment and repairs for health posts, but little or no

training for the auxiliar; others have auxiliars or RPSs trained in some technical areas (though not in an integrated package), but poor equipment and little supervisory support.

5.1.3 Focus on rural areas

Original project documentation suggests that CCH should devote considerable time and energy to community development (though it did not discuss how); the project title, after all, included the words "community health." USAID and the ET recognize that there is substantial need for improved health services in urban areas of Bolivia, as over half the population live in urban areas (broadly defined) and the country continues to urbanize at a high rate. However, the majority of health services are concentrated in the urban areas and almost all health indicators are significantly worse in the rural population (examples: use of modern contraceptive methods, urban 25% versus rural 7%; births attended by a trained attendant, urban 66% versus rural 26%; vaccinations complete between ages 12-23 months, urban 44% versus rural 25%; stunted/ chronic malnutrition, urban 21% versus rural 37%). Thus, the ET concludes that a rural focus for some of USAID/GOB health programming is appropriate.

5.1.4 CCH as a "semi-autonomous" entity within the MOH.

At the time of project design, there were at least two rationales for establishing CCH as a "semi-autonomous entity" within the MOH. One related to USAID's assessment that the GOB was not able to provide the level of accountability required for use of USAID funds. This assessment led

to the conclusion that a semi-autonomous administrative and financial management entity was required. The second related to the need to assure the presence of counterparts in order to carry out the technical assistance and capacity building functions of the project.

Over the life of the grant, however, considerable evolution of the "semi-autonomous" status of CCH within the MOH took place. Interviewees expressed a generalized consensus that CCH has gone beyond "semi-autonomy" to become in most respects separate from, parallel to, and in some cases even in competition with, the MOH itself. While at the district level, the CCH-MOH working relationship appears to be generally constructive, at the department level there appear to be variable working relationships, some positive, some less so. At the central level, until very recently there appears to have been almost complete separation, with little awareness or involvement of the MOH in regard to CCH activities.

Interviews with one former MOH functionary revealed that in the early 1990s, routine monthly meetings of a CCH *Consejo Ejecutivo* resulted in fairly constant technical and policy information exchange and coordination. Though there are unconfirmed reports of eight *Consejo* meetings held in 1996 and 1997, it appears that with the cessation of these regular meetings in 1993, CCH became progressively more separate and "parallel". During interviews, high level technical and administrative staff of CCH expressed the desire that, were CCH to continue (which will not be the recommendation of this evaluation), it should be even more independent from the MOH than it is now, indicating the continuation of this perception of CCH as independent from the MOH.

5.1.5 Differential salaries for CCH (versus MOH) staff.

At project start-up, project administrators apparently assumed that attracting staff to CCH would require payment of salaries substantially higher than those of MOH professionals and staff with equivalent levels of responsibility. The resulting differential in salaries continues to the present, with CCH staff receiving salaries two and three times those of their counterparts. Informants report that this fact has been a point of substantial resentment, and therefore an impediment to working relations, between CCH and MOH staff, and will be alluded to several times during this report. One of the secondary effects of this erroneous decision was to make it impossible to achieve project sustainability: CCH salaries are too high to be taken over by the MOH. In sharp contrast, the Evaluation Team noted that ProSalud, a highly successful NGO, has from the outset aligned its salary scale with that of the MOH.

5.1.6 Sustainability of project inputs and accomplishments.

The 1988 CCH grant clearly foresaw a time-limited involvement in the original four districts, with progressive absorption of project inputs and district-level personnel: the grant states that the GOB would assume an increasing share of recurrent costs, reaching complete coverage of these costs by July, 1993, and that after 2-3 years the positions supported by CCH (administrator, educator and others) would be absorbed into the MOH system. As we have seen, Amendment # 15 went further and required sustainability of all activities within three years. The evaluation team notes with little satisfaction that after ten years, even in the original four districts, there has

been little or no movement toward absorption of these positions, and that there is still substantial dependence on project resources for operating and capital expenditures. When asked directly if the project has an "exit strategy" to graduate districts from CCH, project leadership acknowledged that they actually hadn't considered this possibility. In the absence of any project-initiated thought regarding transition out of CCH support, the evaluation team will make a recommendation in this regard.

The team and other observers acknowledge that the project has, in some districts and municipalities, helped mobilize municipal resources of the *Ley de Participación Popular*, and developed cost-sharing approaches with municipalities, communities and other organizations in the sector. However, this seems to be carried out on an *ad hoc* basis, with not much strategic approach to building the commitment of partners or to moving from one phase of district development to another.

5.1.7 Indicators and monitoring of key outcomes/ Management Information Systems

Several years after the start-up of project activities, CCH and USAID began to invest substantial resources in development of indicators and systems for monitoring key outcomes. (Quality of this information will be discussed later in this report.) As presently structured, however, the team notes that the majority of CCH (and USAID) indicators refer to coverage (more than access) and use of key services. Most CCH indicators focus on a utilization-of-service approach. Moreover, the team notes several gaps in the CCH indicators and monitoring worth considering

in a new project. One of these gaps is indicators of quality of care, although "increased access to quality care" is one of the principle objectives of the project. The present project appears to rely on training as its principal intervention to improve quality of care, and does not monitor performance nor the effect of other constraints (such as lack of drugs or equipment.) Second, there are few processes and management indicators related to key elements of project interventions (*e.g.*, number of communities with trained RPS or auxiliar, number of communities with organized women's groups, number of districts with operating self-sustaining [rotating fund] pharmacies, etc.).

In summary, many of the original project designs are still valid: working with the public sector, working at different levels of the MOH, continuing to focus on the rural areas. However, several design issues need to be significantly recast: the issue of CCH semi-autonomy, the lack of sustainability of CCH salary levels and accomplishments, and a more pro-active, impact-oriented use of the information system. The evaluation will make recommendations in these areas in Section Eight.

5.2. Project Strategies

Various elements of strategy selection will be discussed: provision of commodities of national health programs; institutional strengthening through capacity development; integrated programming; improved quality of care though training; health education, IEC and social marketing; demonstration of new models; data for decision making; community participation; missing strategies; sustainability; and decentralization.

5.2.1 Providing key commodity inputs to national programs.

Through CCH, USAID has provided substantial commodity inputs -- including vaccines and cold chain equipment for immunization and oral re-hydration solutions (ORS) for diarrheal diseases and cholera control -- to national programs. There is general consensus that these inputs, representing 15% of the national expenditure over the last half-dozen years-- have been major contributors to improved coverage and to reduction of infant and child mortality. With a shift of emphasis to Bolivia's increasing self sustainability in both vaccines and ORS, and with the entry of new donors who may be more disposed to provide commodity support than technical assistance, there may be a diminishing requirement for such inputs by USAID. However, it seems to the evaluators that this strategy may still make an important contribution to national programs for a few more years..

5.2.2 Institutional strengthening through capacity development.

A major strategy of CCH was directed to institutional strengthening through capacity development. From the original grant onward, this strategy has been key to supporting the national tendency toward decentralizing, thereby increasing coverage of public sector health services. Indeed, some progress has been made in this regard in CCH districts, especially those that have participated in the project for many years. These improvements include strengthened organization and management capabilities, regular planning, functioning data analysis and reporting systems, improved logistic capacity and increased numbers of trained health workers, especially at the facility level. (This strategy differentiates CCH from such USAID-supported activities as the Reproductive Health and MotherCare activities, which tend more toward policy development, norm setting, and establishment of training and other inputs, but are not as engaged at the operational level.) Especially in light of increased decentralization following the *Ley de Participación Popular*, this institutional strengthening and capacity building will be as important for the new USAID/GOB project as it has been for CCH.

Implementation of this strategy has encountered considerable obstacles, however. One is the instability of counterparts (and of personnel in the public system in general), especially because of politicization of the MOH system. After substantial investment by CCH in developing skills and capabilities of counterparts, a significant number have been released after the recent change of government. This is especially true at the physician level, the "medico de año rural," but it is also true at the district level in MOH supervisory personnel, and at the health post level in the nurse auxiliaries. In addition to politically driven turnover, a strategy must deal with personally motivated turnover: one CCH district visited by the team had three staff members trained in the

district management information system; recently, two of these staff had left the district, leaving only one secretary responsible for entry and cleaning of data and production of routine reports.

CCH has not been especially effective in designing a response to this situation. However, in-depth discussions with CCH staff generated a number of interesting ideas. One idea is to change the "Año de Provincia" system (whereby recently graduated physicians are sent to rural areas to serve their first year.) It should be noted that the Año de Provincia system has been criticized by knowledgeable observers for at least a decade as not serving the health needs of the rural populace: in fact, allowing freshly graduated doctors a year to "experiment" with their recently acquired book learning. Some interviewees expressed the opinion that if the new project were to achieve nothing else than the abolishing of the Año de Provincia system, it would have a major impact in improving the health of the rural population. While the evaluators would not go so far, it is clear that the Año de Provincia system should at least be significantly modified, if not abolished outright. To its credit, the Ministry of Health in its new Strategic Health Plan calls for the evolution away from the Año de Provincia.

Another response to such turnover is to foster the concept that capacity building and training sessions are "modularized" and can be repeated when new personnel enter. This appears to be the case for the CDC-initiated training in information systems and in epidemiology and management for health authorities. It should be recognized that this is a fall-back strategy, and of second priority, but probably a necessity given the frequent changes that are likely to characterize Ministry of Health assignments for the foreseeable future.

A third response is to identify the most stable elements of the system, and increase the proportion of capacity building focused on these people. One relatively stable element in the MOH system is the nurse auxiliar. This person carries out many of the functions of the health system at the periphery, and usually receives little opportunity for training or skill improvement and little support or supervision. CCH has made some efforts in developing the capacity of these people but a future project could undertake this as a substantial focus: the enthusiastic response of a small numbers of auxiliar recently trained through BASICS/CCH in Integrated Management of Childhood Illness suggests that there may be quite a positive response to capacity building among this group. A collateral activity would be providing a career pathway for auxiliars; presently, once an auxiliar, always an auxiliar. Working with one of the MOH departments (which now have the authority to modify personnel schemes to a certain degree), a new project could help define levels of auxiliars (*e.g.*, level 1, level 2, level 3, supervisor) which might identify skills to be mastered and provide incentives and/or increased salary for improved skills and performance.

Another group that is quite stable is the community itself, and often the organizations that exist within communities (such as *sindicatos*). Some CCH departmental staff have acquired experience in training the community health volunteers, though the experience has not been without its difficulties: in one department since 1992, 1,018 people have received training in one or more subjects, only to suffer an attrition rate of from 40% to 65% from one year to the next. Only 224 promoters still function. However, the existence of such people and their capacity for

and interest in tin CCH during the past two years: building community capability in resolving problems, expanding knowledge and practice of preventive and home care interventions, supporting appropriate care-seeking, and creating effective project strategies to reduce the rate of attrition.

An equally fluid group, but also important, is the group of municipal authorities (*alcalde* and *consejales*). Although there is likely to continue to be high rates of turnover in this group, their roles in priority setting and resource allocation indicate that a new project should develop specific approaches to help them become informed about the health status of their communities, identify interventions and resources required to deal with these problems, and plan and monitor activities effectively. The present project has taken important initial steps in dealing with these authorities, including the signing of local *convenios*. The new project should extend and systematize this approach, developing the information and methods needed. Indeed in some departments, CCH has established the combination of health indicator information, trained educators and community participation techniques. These elements should provide the inputs needed to develop an approach that could be applied throughout the country in orienting and mobilizing municipal authorities for public health priorities. Given the short time in office of these authorities, (in the worst of cases, even less than a year), such an approach should be "modularized" and repeated as needed. Even with frequent turnover of these authorities, all is not lost, since such capacity building may contribute to broader community awareness and mobilization as those elected at any time will probably remain important opinion leaders in their communities even when out of office.

A final issue to be dealt with in capacity building is the need for a systematic approach and possibly a defined "package" of elements that a project would bring to a district, municipality or community. Certain elements of CCH's capacity building work, such as the CDC-derived MIS and district management and epidemiology training, are definable elements and have been applied generally; there are also modules for Training of Trainers, and Diarrhea and Acute Respiratory Response protocols. Other important systems, such as the self-sustaining revolving fund/ district drug supply seen by the team in Patacamaya, have not been applied uniformly.

The Evaluation Team will recommend a structure more able to respond to different district-defined needs. However, it is also true that both success and replication in programming depend upon having a definable set of interventions and methods which can be applied in multiple sites. The uniform application by CCH of the CDC HMIS and the district health officer and administrator training in management and epidemiology mentioned above are examples of this principle. AIEPI course work (Integrated Management of Childhood Illness) is another. The new project should build on this principle and develop a systematic approach and definable elements to its capacity building process.

5.2.3 Integrated programming

The evaluation team supports the fact that CCH has applied its operational work in a generally integrated approach to PHN programming. In accordance with the project design, this

programming has included elements of child survival, maternal and reproductive health and family planning; most of the project's indicators are related to these interventions.

Some technical areas supported by the project but not generally associated with reproductive/ maternal health, child survival or family planning are of public health importance in a number of project areas: TB, oral health, malaria, Chagas disease, yellow fever, leishmaniasis, venomous bites, rabies and epidemic surveillance. In some areas, these conditions may play a role in maternal, infant or child mortality. Moreover, some of these conditions may, in fact, be excellent targets for funding under USAID's new Infectious Diseases strategy, especially TB, malaria, and epidemic surveillance (with Chagas disease as a target of opportunity).

While some of this financing and activity may seem to stretch the focus of the project a bit far, resulting perhaps in less than appropriate attention to key elements of reproductive/ maternal health, child survival and family planning, it will be difficult in a new project to avoid such "entanglements." To coincide with the MOH's new focus on *municipios saludables*, "healthy towns", more flexibility will be required than heretofore in allowing district health officials and municipal mayors to have a say in defining what are the local health priorities. Fortunately, under the new decentralization structure, a new project has a role in "leveraging" such interest: perhaps picking up some non-project item expenses on a cost-sharing basis, perhaps providing a "tit-for-tat" financing of project priority items in exchange for the municipalities' providing financing for activities that USAID judges outside its ability to finance.

5.2.4 Improved quality of care through training.

The CCH project has made substantial investments in training during its ten years of existence. This has included a large number of courses and in-service training, as well as the development and support of training centers in specific technical areas. Given the need for development of knowledge and skills of both health personnel and community members working in health, this has been an appropriate investment strategy. A new project should continue to make substantial investments in training, capacity development and skill building.

However, one element of the current project that requires re-examination is the assumption that training equates to improvement in skills and performance by trainees, and improvement in quality of care. This assumption has been shown to be invalid in numerous settings worldwide. In Bolivia, in the early 1990's, CCH and partners performed an evaluation of the performance of health workers trained in management of diarrheal diseases and found essentially no difference in performance between trained and untrained workers. The global conclusion is that training is a necessary, but not sufficient, intervention to improve performance and quality of care. It appears to the evaluators that CCH has not developed or invested in complementary approaches beyond training to improve quality of care. In addition, as noted previously, CCH is not substantially collecting information on indicators of quality of care. There are reports that the most recent epidemiological survey included a client satisfaction question which could be built upon.

As noted earlier, such training should be aimed more at the more stable levels of the health system: auxiliars, RPSs, members of community organizations, district health staff and municipal authorities responsible for health activities. To the greatest extent possible, skill-based and hands-on (rather than didactic) training approaches should be utilized. At the same time, a new project should monitor performance of trainees and quality of care with rigor that CCH has not. It should also support improvements in quality of care through post-training follow-up, use of supportive supervision that includes performance indicators, application of quality improvement methods that include local problem identification, educative feedback through counter-referral and feedback collected from clients on perceived quality of services.

5.2.5 Health education, IEC, and social marketing.

Over the life of the project, it appears that the importance of quality health education has grown in CCH. One major project contribution in this regard has been the creation of a cadre of health educators at the district level. It appears to the evaluators that CCH has evolved appropriately in this area, increasing the mix and channels through which it attempts to provide information to the population. More recently, the project has entered the area of social marketing, with the *Agua Claro* water project described elsewhere.

The evaluation team was notably impressed with the CCH educators it saw in the field. In two of the three Departments, it seems clear that some of the most creative and energetic staff are the educators. In one department, education staff put on forty nine events during 1997, virtually one a week, and the staff person was articulate in describing strengths and weaknesses of the course

work. In that same department, a 15 month course (!) had just been finished for twenty-four auxiliars. Also in this department, CCH staff had kept track of all of the community health volunteers and nurse auxiliars who had been trained under CCH auspices and could report on how many were still working, how many had left the area, how many had moved into local municipal leadership positions, etc. (It is this sort of pro-active"spark" that CCH should do a better job of encouraging.) In another department, a well-received, hands-on nurse auxiliar training course in Integrated Management of Childhood Illness had recently been conducted for half of the auxiliar corps, with the other half to be trained as soon as there was space.

The potential effectiveness of low cost approaches, such as use of rural (versus national) radio and other real-time channels such as market day strategies and work with churches and community organizations has been experimented with in CCH and should continue to be explored. In addition, the new project will need to look in a more aggressive way than CCH has, at the fact that worthwhile, well-tested and validated materials related to reproductive/ maternal health, child health and nutrition and family planning, have been developed by organizations including UNICEF and NGOs. The cost of adapting and using these materials is likely to be substantially less than the cost of developing and testing new materials.

There is an issue of sustainability in this emphasis on health education and IEC. Specifically, it is highly unlikely that district and municipal authorities who would have to assume the costs of a permanent health educator and activities currently financed by CCH, are convinced of the importance of behavioral approaches in improving health and survival. At present, CCH is in many cases supporting formative research, production costs and air time for mass media.

Continuing such support under the new project will certainly be necessary for a period of time, and it will be important to enter dialogue with the MOH and municipalities, as well as other organizations and the private sector, to seek ways to share the costs of these activities. In a new project, the evaluators will be proposing that these activities be conceptualized as strengthening the *demand* side of the equation, while many other activities will be directed at the *supply* side. Finally, the new project should continue to develop the capacity of health educators and others involved in IEC/behavior change activities by developing their ability to apply updated and new skills and approaches.

5.2.6 Development of new models/ demonstration effect

With its combination of direct involvement in field programming and high technical expertise, CCH is well positioned to develop, implement and evaluate new models of service delivery and program management. This does not seem to have been a priority of the current project, however. One example in CCH appears to have been the implementation and evaluation of improved housing in reducing transmission of Chagas disease. While this intervention was undertaken specifically to inform the development of a national strategy (and while the activities themselves likely brought considerable benefit to the client group,) it seems apparent that until perhaps very recently, this informing of national opinion has not occurred to any noticeable extent. Another example has been the successful implementation of a water component which was universally valued by interviewees as an important contributor to the health of the communities, but with little national effect. In both Chagas and water, the evaluation team will

be recommending a continuation of program activities, though in a way different from the direct, hands-on operation of CCH.

A new project can "model" other program experiences in CCH. Possible examples include: the self-sustaining district pharmacy model (developed, but not yet documented or disseminated by CCH); development of a participatory approach to increase awareness and commitment of municipal officials to major public health problems; adaptation of a model of community participation, sensitization and problem-solving; and the use of community participation for tuberculosis case-finding and as a practical approach to approximating "DOTS" (Directly Observed Therapy), the World Health Organization's recommended approach to TB. Elimination of the Año de Provincia system is another such "pilot", as is creation of a "career ladder" for nurse auxiliars.

5.2.7 Promoting data use of information for decision making.

With early support from the CDC Data for Decision Making project, CCH has made important contributions to the development and use of information systems in the country, especially at the decentralized level. Outputs are at least three: a relatively smoothly functioning computer-based information systems in project districts, district-level managers oriented in (if not yet practicing) use of epidemiologic data in management decisions, and improved functioning of district and department-level mechanism for data review and action (the "CAIs", or *Comites de Analisis de Informacion*). The information and analysis capacity building has clearly defined components

and manuals and guides for implementation. At the request of the national government and with support from the IDB, selected national program managers, departmental and district were reportedly included in recent CCH/CDC training in epidemiology and management. CCH's approach has been designed to be entirely compatible with the National Information System (SNIS), and in some cases has contributed to improving SNIS performance.

At the same time, there are a number of issues which have not been adequately dealt with by CCH. The most important of these is the failure to apply critical analysis to the information generated. This shortcoming was noted by the team at both the central and district levels, and is illustrated by the following examples:

- In 1996 and 1997, central level SNIS data and district-level health information systems produced reports of DPT-3 immunization in CCH districts of around 50%, based on routine reporting from health facilities. However, the 1994 *ENDSA* study identified DPT-3 coverage in rural areas (by card and mothers' recall) to be 34%, and the CCH base-line (sic) survey in 1996 identified a DPT-3 coverage (by card only) of 26%. Such discrepancy between routine service statistics for immunization is internationally recognized, where service statistics are generally over-reported and more reliable estimates of coverage are based on surveys. However, if the local district/ municipal health committees are to use project-generated data for decision making, clearly the appropriate management decision in the face of 34% coverage is substantially different from a decision if the coverage were 50%. While CCH staff, on questioning, report

themselves “concerned” about these discrepancies, there have been virtually no attempts to ascertain the reason for these discrepancies, nor to determine even in selected areas which data source is providing the information on which health program managers should act. This discrepancy is of urgent importance, since in regard to DPT, the country and CCH districts appear to be acting as though they have 80% coverage, when in fact coverage is likely much lower.

- Calculations based on the project’s own data regarding treatment of diarrhea cases by village health volunteers show that CCH-trained volunteers treat 1 to 2 cases of diarrhea each year. Clearly, there are a number of possible explanations for this low number, among them: under-reporting by RPSs, use of other community services (such as UROs) instead of RPSs for treatment of diarrhea, or non-use of community services for diarrhea by the population. Identifying the real reason would clearly have implications for program management. However, the project had neither identified this issue, nor undertaken any further studies to identify the operational situation.

- The national strategy for reduction of maternal mortality includes a strong focus on improved identification and treatment of complications of pregnancy, labor and delivery, and the post-partum period. The project’s data system already provides an estimate of the number of pregnancies expected in each district. With a simple calculation based on internationally accepted estimates (that 15-20% of women will experience obstetric complications during pregnancy, labor and post-partum), the project could calculate the

expected number of obstetric complications in each district. This estimate could then be compared with the actual number of complications arriving at health services, as an indicator of success or unmet obstetric need of maternal health efforts. Moreover, there are examples of locally generated census data which the information system will not accept, being designed on and "locked in" to demographic data. Again, project staff had not used its own data to examine this critical element of the maternal mortality reduction strategy.

The evaluation team's conclusion is that the information system and strategy of promoting use of information for decision making is one of the project's most solid accomplishments, but that it is operating far below its potential in guiding effective health decision-making.

It will be important for the new project to build upon the information systems, training and analysis capabilities developed under CCH and to identify mechanisms to continue to provide training and support to district and departmental personnel. In addition, a new project must provide attention to quality of data and to critical interpretation and follow-up of data and information produced by the system. This is as much a leadership function as a technical function. Finally, the new project should expand the "data for decision making" concept to the municipal and community levels in order to help sensitize and involve these levels in regard to appropriate public health actions.

5.2.8 Community participation and mobilization

Despite its name, CCH appears to have had a relatively weak strategy for working in and with communities during its early years. The only substantial community development efforts the evaluation team was able to discern were carried out in a comparatively small number of communities associated with the water component or with house improvements under the Chagas program. Additional efforts existed in other areas of the project, but there was generally a focus on strengthening health services and on promoting demand for those services, rather than on organizing and working with communities to promote health-related behaviors and to identify and address their own health problems.

In the past two years, there appears to have been an increased emphasis on such community-based interventions. Project commitment to this approach was manifested by the hiring of field-experienced and highly skilled community participation specialists. During the recent past, the project has applied these techniques in a limited number of sites.

Given the continuing trend to decentralization and popular participation, such community approaches have to be obligatory elements in efforts to strengthen and sustain health programs, improve health and achieve people level impact.

A new project should substantially expand the application of community participation and mobilization. As noted previously, the new project may be able to develop and evaluate approaches, document them systematically and make them available throughout the project and

to other parts of Bolivia. Communication and exchange of experience, materials, and methods with other organizations working in community participation in Bolivia (such as UNICEF, NGOs, and others) will be essential to reap the greatest benefit from such experience and to apply resources effectively. Facilitating such communication could be an important role for the project's technical leaders.

5.2.9 "Missing" strategies

One potentially important strategy that the CCH project has not had much involvement with is that of operations and evaluation research. With CCH's operational outreach and its (potentially) high caliber technical leadership, the evaluators judged that CCH could have become involved in program-based research to help identify and resolve problems in service delivery in ways that have rarely been thought of. With adequate documentation, such program-based research could also inform programming of the MOH and of other partners. Examples might include interventions to provide urgent treatment and transport at community level for severely ill children and complicated births, evaluation of availability of essential drugs and commodities on service utilization, approaches to improve micro-nutrient (iron and vitamin A) supplement utilization, and approaches to deliver impregnated mosquito nets in malaria-endemic areas.

5.2.10 Sustainability

Absent from this discussion so far is the word "sustainability." The reason is that most of elements proposed in this discussion of strategy selection can be thought of by their nature as sustainable interventions. Institutional strengthening, capacity development and training produce a sustainable product when the trainees learn the lessons sufficiently well that they practice the behavioral change (hence the evaluators' insistence on course follow-up.) Integrated programming occurs when the community continues to avail of MOH services after the project has departed because the quality and quantity of the service is good. The sustainability of health education is in stimulating *demand* for better health services, not whether the municipality is willing to finance radio spots. In this formulation, the evaluation team suggests that sustainable activities be thought of not necessary as ones which a municipality will take over, but those which continue on after the project has withdrawn.

5.2.11 Decentralization

The last element to be discussed in strategy selection is that of decentralization, a subject that has come up over and over in the preceding narrative. As the current CCH project has not achieved dramatic success in this regard, its discussion has been held to the last. Notwithstanding, it remains the cornerstone finding of this evaluation team. The reader is referred to the Recommendations chapter where the subject of how to achieve more effective administrative functioning and higher program performance under a decentralized project structure is discussed at length.

5.1.12 Summary

In summary, many of the original project strategies are still valid: providing key commodities, capacity building, integrated programming, improved quality of care through training, health education, data for decision making, community participation and decentralization.

5.3 Technical Issues of Health Program Selection

Technical choices to be discussed are child survival, health and nutrition; maternal health, family planning and reproductive health; “piggy-back” projects; water programming; and new areas of potential programming.

There can be no question that CCH’s focus child survival was appropriate: while there has been real improvement in many key health indicators in Bolivia over the past ten years -- a fact for which USAID and CCH should take some credit and satisfaction -- the country’s status in relation to infant and child mortality, women’s reproductive health and family planning remains among the worst in the Hemisphere.

5.3.1 Child survival, health and nutrition.

The original CCH grant called for a major program effort directed to child survival. The key subjects to be discussed below are peri- and neonatal survival; immunization; prevention and treatment of diarrhea, ARI, and malaria; and nutrition.

5.3.1.1 Peri- and neonatal survival

The current CCH project has not addressed much activity to the area of peri-natal and neonatal survival. The importance of this area has partly been brought into focus by USAID-

supported work in Bolivia which demonstrated that a substantial proportion (47% by the 1994 *ENDSA*) of infant mortality occurs in the first month; an additional important proportion of pregnancies result in babies who die before or during birth, and thus are not even counted. The biological and programmatic linkages of peri- and neonatal survival to maternal health and survival are obvious, but inadequate progress has been made in addressing these areas.

Part of the response will require strengthening and improving technical quality of the health services that provide both maternity and newborn care -- especially care of complicated pregnancies and deliveries and of sick newborns. Since the majority of births in Bolivia occur outside the health system, the new project should work with other partners to define and apply community-based interventions aimed at maternal and newborn health and survival. These should include preventive interventions, such as improving maternal nutrition, assuring tetanus toxoid immunization for women, promoting clean and safe delivery and appropriate newborn care (including cord care, hygiene, warming and breast-feeding). They should also include educating community health volunteers and families about danger signs and urgent care-seeking in the face of newborn illness, and identification of possibilities for urgent immediate care and transport of sick infants as well as for sick mothers.

5.3.1.2. Immunization.

With the probable exception of measles, immunization coverage in Bolivia is still probably lower than is acceptable (the uncertainty in this statement being occasioned by the data

issues discussed above). Moreover, in many parts of the country (including many CCH districts), it appears that the majority of immunizations are given through campaign and catch-up approaches, house-to-house campaigns which are costly and usually have negative impact on other health services (for example, closing the health posts while health workers vaccinate house-to-house.) The new project should contribute to developing and evaluating strategies which can increase Bolivia's immunization coverage in the most effective, sustainable and affordable way possible. One potential contribution could be an adaptation of the "carpeta comunitaria", a community folder, used by nurse auxiliars in CCH districts. Perhaps with adaptations to align it more clearly with the census-based approaches used by NGOs such as Andean Rural Health Care and others, the *carpeta* could identify specific under-immunized children in communities and use community networks to encourage mothers to bring these children to health posts.

Another challenge in immunization is the possible distortion effect of single-disease strategies such as measles elimination. These campaign-based strategies can undermine more sustainable approaches to immunization, but they also bring additional resources, political commitment and visible achievement. Therefore, USAID and the new project should have a strategy that relates measles elimination to building sustainable immunization and primary health care programs. A generic form of such a strategy has been developed by USAID's Global Bureau which could be adapted to Bolivia in a new project.

5.3.1.3 Prevention and treatment of diarrhea, ARI, and malaria.

At the central level, CCH has invested a great deal of money in the purchase of oral re-hydration salts because diarrheal diseases (and ARI) remain major causes of infant and child mortality. At the district and health post level, it is clear the message of ORS is widely diffused. The evaluators did not have the opportunity to investigate how widely the salts were being distributed or used. Given that MOH statistics propose that each child will suffer at least six episodes of diarrhea per year, and that the community health volunteer data suggest that only one or two episodes are being treated at the health post (per *year*, not per child), it is likely that ORS usage is still not what it should be. The new WHO/PAHO/UNICEF strategy for "Integrated Management of Child Illness" (IMCI) provides an integrated approach to the treatment of these diseases and well adapted to a decentralized environment, and has begun to be promoted by CCH.

With technical and material assistance from USAID, the World Health Organization, the Pan American Health Organization (PAHO) and UNICEF are currently adding two additional components to IMCI. One is aimed at improving drug supply, management and supervision in order to improve quality of care provided to children by health services. The second is aimed at the community level, promoting child health and nutrition and improving prevention, treatment and care-seeking for the most important child illnesses. These additional approaches are well suited to the needs of programming in Bolivia, and the new project should maintain its engagement in the IMCI approach. In fact, since PAHO has taken the lead in the development of certain aspects of the two new components (such as IMCI training for community health workers), the new project may provide an opportunity to collaborate in the early application and

evaluation of such elements, providing improved program approaches to its population while also providing technical leadership within the country and region.

5.3.1.4. Nutrition

The nutritional status of Bolivia's children is actually worsening, despite improvements in other indicators. Over 20% of rural children are below the international standards of appropriate weight for age. Present understanding demonstrates that infant and child mortality increase exponentially as children's nutritional status declines, and that mild and moderate malnutrition (being most prevalent) account for the majority of this increased risk of mortality. This means that in Bolivia under-nutrition is itself a significant contributor to infant and child mortality.

While CCH's current program indicators include participation of children in "growth monitoring" programs, it is not clear that these programs are associated with substantive approaches that are likely to impact on child nutrition. Growth cards were reviewed in a number of MOH clinics during the field trip, with less than the usual number of inconsistencies noted; however, the number of such growth cards seemed decidedly low in comparison to the number of children supposedly in the catchment area of the health facility. Global experience has demonstrated that community-based approaches, combined with (but not replaced by) IEC interventions, are necessary and effective in improving breast-feeding and complementary feeding practices. With decentralization, municipalization and community participation, such

approaches should be incorporated into programming, and their effectiveness documented. Practical technical assistance in such nutrition programming can be obtained from USAID centrals projects; other sources including NGOs in Bolivia may also have important experiences and models to share.

In regard to micro-nutrients, iron deficiency is highly prevalent among women and children in Bolivia, and vitamin A deficiency is also highly prevalent among children in many parts of the country. Iron supplementation of pregnant women is an important, albeit challenging, strategy (since acceptance is low despite provision of supplements). Under a collaborative relationship with OMNI, the CCH project has been engaged in the distribution of iron folate tablets. The quality of the CCH intervention is suspect. There has been virtually no follow-up on whether the thousands of pills have actually been consumed; indeed, there is some suspicion that they haven't, since the project only distributes supplies to the mother a month at a time. A new project should collaborate with technical experts to seek effective means to promote adequate iron consumption by pregnant women.

Since Vitamin A supplementation of children deficient in this micro-nutrient is associated with over 20% reduction in infant and child mortality, USAID has undertaken a global strategy to deliver this key micro-nutrient. Major components of the strategy include fortification of commonly used manufactured foods, supplementation through use of Vitamin A capsules in populations not likely to consume adequate amounts of manufactured foods and improved dietary practices. This intervention has received some, but probably inadequate, attention under the

CCH Project. A new project should work with USAID to assure adequate implementation of the relevant parts of this three-pronged Vitamin A strategy, especially supplementation. Given its potential impact and relative simplicity, the new project should make accelerated efforts to increase Vitamin A intake among infants and children in its target districts.

5.3.2 Maternal health, Family Planning and Reproductive Health

Maternal and reproductive health was implicitly added to CCH, with the signing of Amendments #9. However, the history of Reproductive Health (RH) in CCH is complicated. Apparently in July 1996, RH funds were added to the CCH budget (PIL # 36) but these funds were eventually returned to USAID. CCH staff energetically insist that they were never aware of the existence of these funds, thus contributing to why the money was not spent. Later on, one USAID staff person reports that at first USAID required that CCH undertake a reproductive health effort, but then when the energy had been expended to prepare a project proposal the funding had disappeared. When funds re-appeared later, but in a lesser amount; the CCH staff were again required to come up with an expenditure plan, but in a geographically restricted area. When funds finally did come on line, it was almost a full year after the PIL had been approved. When all is said and done, reproductive health financing is a part of the current CCH budget, but it is clearly seen as an “add-on”.

The first observation that occurred to the evaluators was why a program of such complexity was added with only nine months left in a ten year grant. RH carries with it considerably more

programming complexity than most child survival interventions. For example, it is much riskier to poorly present counter-indications for the pill or Depro-provera, than to poorly deliver message on exclusive breast-feeding. Moreover, the best RH programming does not present one method, but rather all of them, leaving it to the woman-- and her spouse-- the decision which method to practice. With groups of low education, implementation of these ideas frequently involves one-on-one counseling and high quality IEC. While there are reports that IEC materials have been prepared in this regard (which the ET did not review), the compressed time frame of project activities has meant that neither high quality IEC nor one-on-one counseling are evident in CCH on-the-ground activities.

The second observation of the ET is that the RH activities seem off to a rocky start. Implementation of CCH RH activities has only been approved for one area, Santa Cruz. The modality being employed is for CCH to hire-out the services of a local Santa Cruz NGO to provide family planning services. As the program is only four or five months into implementation, it is too new to evaluate fairly; however a first "guess" made by the evaluators is that the activities have a long way to go before they can be said to be delivering a quality-controlled product.

Third, modern methods of Reproductive Health are still relatively new in Bolivia. The preferred method of control of ovulation is inter-uterine devices and the pill, each accounting for 15 % of users. Condom use is next, low at 5 %. Depo-provera would seem to fill a culturally appropriate niche but is not yet widely available (though there are reports of considerable stock in the

country,) perhaps in part because of their cost or because MOH staff have not yet received adequate training in the method. The evaluation team was unhappy to see that the rhythm/ calendar method is being used by 33% of women in union; and the method is promoted, discussed, and has CCH-financed flyers to support its promotion when the literature provides strong evidence that rhythm and the calendar methods have very low success rates.

These paragraphs are not to suggest that Maternal and Reproductive health are not high priority in village women, as nothing could be farther from the truth. The need for quality-driven reproductive health services is acute in rural Bolivia where the average live births is 6.2, among the highest in Latin America. During the evaluation team's interviews, village women expressed keen hunger for reproductive health services. Moreover as reported in the 1994 DHS, while maternal mortality in the country is (a relatively alarming) 399/100,000, in the rural Altiplano it is a shockingly high, 929, nearing indices ofan countries. The team will, in fact, be recommending that RH be included in a new project. But such a program must be conceived of, implemented and supervised in a more rigorous and professional way than CCH has to date for it to achieve any meaningful impact.

5.3.3 "Piggy-Backed" Projects

Mention has been made in the previous paragraphs of program elements which have been added to the project over the course of the years, and it is important to bring some order to this theme. The evaluators have coined the term "piggy-back" to indicate the nature of these interventions:

activities which were not conceived of as part of the original project, but which because of the opportunity of additional funding, or program complementarity, or administrative convenience to USAID or for whatever other reason, became part of CCH. Because of the large number of such projects, ten, the narrative which follows will be brief for each. To be discussed are: OMNI, BASICS, DDM, Chagas, EHP, AIDs/ STDs, Centinelas de Salud, Population Council, SERVIR, and Health sector reform. Note that a valid distinction can be made between piggy-backs which come out of USAID/ W and are related to institutional strengthening of child survival activities (such as BASICS and OMNI) and other piggy-backs where the programmatic interface is more tenuous. This issue will arise again in the recommendations section.

5.3.3.1 OMNI

Opportunities for Micro-nutrient Interventions (OMNI) works in Vitamin A, iron, fluorine and iodine. The project has reported working in conjunction with CCH in the distribution of ferrous sulfate tablets since 1995 (though OMNI dates back nearly a decade in Bolivia.) Evaluation of this program falls outside the scope of work of this document; OMNI staff report that in 10 years, there has been no significant change in the prevalence of low anemia in 50% of the Bolivian pregnant population and an extension to the 10 year project is under active consideration. The evaluators can attest to the fact that CCH-supported clinics are usually (though not universally) well stocked with ferrous sulfate tablets. However, distribution to mothers is handled on a month-by-month basis, suggesting that there may well be some issues with the appropriate utilization of these tablets by the pregnant population. There was a

comment from one of the MotherCare staff to the effect that percentage of successful completion of this regime could be less than 2% in the country. While consumption in CCH areas could be higher, problems with packaging, especially for tropical areas, still had to be addressed. To the evaluators' knowledge, no one in CCH has ever studied the consumption issue.

5.3.3.2 BASICS

Basic Support for Institutionalizing Child Survival is a USAID centrally funded project, addressed to improving child survival programming worldwide. BASICS provided technical assistance to CCH field staff in the person of a Bolivian physician specializing in child survival and diarrhea and in information, education and communication methodology. It also financed some of the literature CCH-supported clinics distribute in child survival themes. A recent contribution of BASICS to CCH has been introduction of the concept of Integrated Management of Childhood Illnesses (in Spanish, AEIPI). BASICS supported several workshops for nurse auxiliars and MOH personnel training them in integrated attention; these workshops were reported by interviewees as some of the best training they had ever received, because it was "hands-on" training, working with patients in hospitals, learning to apply the book-learning in real-life situations.[2] While the "marriage" BASICS to CCH was an imposed affair-- the BASICS team reports they would initially have preferred not to have to work with CCH but were forced to

[2] While the evaluators were in Santa Cruz, a BASICS course was finishing and one evaluator was able to conduct a group interview with the course attendees who reported themselves pleased with the "hands-on" nature of the course: they had become "bored and tired with" the overly didactic seminars that they usually attend and this was a nice change.

by USAID-- it appears that the relationship has been beneficial to both parties, one of the well integrated “piggy-backs.”

5.3.3.3 Data for Decision Making (DDM)

Data for Decision Making is a Harvard University/ Research Triangle Institute/ Centers for Disease Control consortium whose mission was to develop national capacities to manage health sector reform, making use of available data and advanced analytical techniques of data management. DDM apparently has a number of different activities with the Ministry of Health in Bolivia, one of which has been training some MOH staff in CCH districts in data management, epidemiology, communications and management. Unfortunately, with vast personnel changes in the MOH after the recent elections, it was reported that few of the DDM-trained staff remain in data analysis positions. The evaluators did not have the opportunity to interview any DDM-trained staff. Some report that this relationship has been viewed as one of the more effective of CCH projects. Leaders of past governments were trained in Atlanta and continued their training on their return to Bolivia (and may be brought back into the power structure in the future.) The second course focused on CCH district level staff and integrated some district staff from areas where the World Bank is working. One interviewee suggested that DDM’s timing has been poor: each of the major training sessions took place near the end of a political cycle, making it a fair likelihood that those trained would not continue in public service for long. It seems likely that heavy investment in expatriate-run training courses (characteristic of the first course) is probably not the way such training should be conducted in the future.

5.3.3.4 The Environmental Health Project (EHP)

The Environmental Health Project (EHP) has been working with CCH staff in six villages of Santa Cruz in a response to high incidence of diarrhea. The model being proposed is one of "community diagnostic/ community development/ infectious diseases/ revolving fund." EHP is reported as currently in a pilot phase which promises to be a model for future activities of a new infectious disease component. Integration at the local level is reported good and working relationships which have also included expert consultants on vector-borne disease, has apparently been good also. The evaluators did not have the opportunity to visit any of these villages, thus cannot comment on the effectiveness of the model. The scale of the EHP involvement and the staff time reportedly involved, working in one-hundredth of CCH villages does seem worth examining.

5.3.3.5 AIDS/ Sexually Transmitted Diseases (STDs)

AIDS/ STD activities are reported to have been transferred to a CCH-supervised project administrative unit in Sept. 1992, to handle contracting and financial procedures, with staff hired to direct the technical operations. From 1992 to 1996, there was no direct technical collaboration between the AIDS project and CCH. In Nov., 1996, the AIDS/STD project was placed under the technical direction of the CCH Executive Director in PIL # 46. At that time, the AIDS project

team approached CCH to integrate STD services into the reproductive health activities being offered by CCH at the district level, with the first technical assistance taking the form of an STD prevention workshop for CCH health personnel. In 1997, three STD diagnosis, treatment and counseling training workshops took place for MOH staff in project districts. CCH leadership has also provided support to the AIDS project in negotiation and development of departmental agreements in Sucre, Santa Cruz and Cochabamba for the creation of rotating funds for STD reagent replacement. The basic idea was for the exchange of technical expertise on the one hand— the AIDS staff offering T.A. in the integration of STD services into CCH's reproductive health program— and administrative know-how on the other— CCH assisting the AIDS project with political and administrative support in negotiating department agreements and rotating funds. Finally, there is some innovative work being done in the city of Santa Cruz with project support (though Santa Cruz city is clearly outside CCH's program area), with 250 medical personnel given 12 hour classroom training in AIDS/ STDs recognition and treatment-- six times the number of participants originally planned. Notwithstanding the innovative nature of this work, the relationship between this target group and the CCH project seems tenuous. At the time of ET interviews, the CCH Executive Director alluded to the fact that AIDs/STDs were currently taking up half of her day (!), clearly a managerial burden among all her other priorities.

5.3.3.6 Centinelas de Salud

Centinelas de Salud is a program to work with the Armed Forces of Bolivia focused on army recruits and on students currently complying with the military service. This program which

trains about 40,000 recruits and officers a year is coordinated with other institutions like UNICEF and has posed few technical or administrative problems on CCH. This is a program that fits well into the global support of the MOH but was not planned as part of the CCH structure.

5.3.3.7 SERVIR

SERVIR is a local NGO working in the area of reproductive and sexual health in the district of Los Yungas to the east of La Paz. At the time of the SERVIR relationship, this area of activities was outside the area of influence of CCH. Documentation prepared by CCH presented to the evaluation team does not describe the relationship and USAID staff admitted privately that this was a USAID impositions on CCH.

5.3.3.8 Health sector reform

According to project documents, a health sector reform activity was piggy-backed onto CCH's administrative structure in PIL # 45 on August 15th, 1996. This is a two-person operation, whose responsibilities are principally to host fora on subjects of national debate and to publish occasional booklets on such topics. Among recent documents are: the National Mother and Child Insurance Plan; Reproductive Health, Challenges and Future Perspectives; Balance and Perspectives of Health Reform in Bolivia; and Public and Private Health Insurance. If the subjects are of high interest to USAID and national health planners, their relationship to CCH

field activities seems a little distant. This sector supports central government activities and has been useful in promoting dialogue and producing information for formulating health policy. Although this was not part of the original purpose of CCH, these activities are reported as fitting well into the role that CCH has in support of the MOH.

5.3.3.9 MotherCare

MotherCare is not really a "piggy-back" in the sense we have used it with the previous entities since it is has its own administrative structure and has not relied on CCH for administrative services. It is a project run by John Snow, Family Health International, PATH and others to conduct research and innovations in integrated reproductive health, anemia, antenatal care, STDs, family centered maternity and neo-natal care. In Bolivia, among a number of other high-quality outputs, MotherCare has produced a manual on obstetric risk management that could serve as a primer for quality control at the primary level of care. MotherCare also financed a 27 day course for MOH staff in Cochabamba on educational methodology and emergency obstetrics for 22 auxiliars and 4 nurses. While the course was apparently quite well done, taking MOH staff away from their posts for an extended absence caused resentment and criticism in some circles. MotherCare conducted some of its epidemiological studies in CCH areas and trained MOH staff in some CCH areas of La Paz and Cochabamba. In spite of the clear high quality of this work, the inter-institutional coordination which would appear to be so useful for each organization does not appear to have taken place: to the evaluators it appears that CCH staff do not avail themselves appropriately of the MotherCare experience.

5.3.3.10 Population Council

Population Council activities also evidently did not require administrative support. It appears that the Population Council had some involvement with CCH from 1993 to 1995 and again in 1997. In Cochabamba, some nurse auxiliars were reported trained to insert IUDs. The working relationship in the area of Capinota was apparently well conceived and executed at a time when CCH did not have the burden of so many other activities.

5.3.3.12 Chagas

The Chagas piggy-back is a little more complicated than those previously described. First, the CCH project was one of the first to recognize the epidemiological importance of Chagas in Bolivia: prior to CCH's involvement in the late Eighties, few outside of Bolivia paid Chagas any attention. In fact, it is one of the most wide-spread diseases in the country. Second, with Amendment #9, Chagas was added to the Output and Purpose statements; also it became part of the CCH program in a significant way with the addition of approximately $4 million dollars of additional resources. With these resources, CCH began a large-scale, staff-intensive Chagas effort. At the close of the sub-project in 1995, 3,574 houses had been improved, 10 in-depth epidemiological studies were completed, 114 village promoters/ masons had been trained in Chagas recognition and a serological laboratory had been established in Cochabamba. What had not been accomplished was the creation of a National Chagas Disease Control Program

called for in Amendment # 9. Interviewees express mixed opinions on the impact: one reported that some of the best quality AIDS research done in the Hemisphere came about as a by-product of the Chagas project's interest in serological studies (since blood studies to evaluate Chagas can also be used to evaluate AIDS). Several other interviewees reported that in essence since no national program evolved out of it, the project was primarily a pilot study.

Summarizing a great deal of widely divergent currents in the "piggy-backs" and near piggy-backs, it seems to the evaluation team that several of the projects brought considerable program richness to CCH, but that the majority did not. Moreover, as will be mentioned elsewhere, the addition administrative burden of managing these projects was significantly underestimated, whether the adoption was forced or voluntary. Both USAID and CCH staff can accept shared responsibility in this realm. Beyond the administrative burden, the evaluators judge that the more serious responsibility to *integrate* the learning of these piggy-backs was serious under-exploited.

5.3.4 Water Programming

Water programming, like Chagas, is not a "piggy back", included as it was in the original grant as a sectoral activity and confirmed in Amendment # 9 as one of the five principle foci of CCH. The original grant called for the construction of 160 water systems, 1,150 had pumps and 15,000 latrines. With the signing of Amendment # 9, those goals were reduced to the construction of 125 water systems. As reported to the evaluation team, actual accomplishments have been 98 systems constructed benefitting 126 communities (some systems benefitting more than one

community), and 6,890 latrines The evaluation team did not have the opportunity (or time) to conduct any inspection of the water systems, thus must rely on previously conducted evaluations to comment on this project component.

In Dec., 1994, an EHP evaluation was conducted of the CCH water component (along with comparative analysis of other water programming entities in Bolivia.) Summary results are that the quality of the water system construction is relatively good. Of 6 systems inspected, all were rated as "good". Latrine construction was not as good, but still acceptable. Costs were somewhat higher than other Bolivia water system builders but not outside the range of international standards for the level of service being provided, approximately $125 per capita.

The water component was closed at the end of 1994, in part due to the programmatic analysis provided by the Sector Review.[3] On the positive side, that analysis concluded that the activity was highly prized by the communities and clearly was providing significant health benefits to the (relatively few) communities CCH could work with. On the negative side, the investment required per capita was such— given Bolivia's deficit in terms of rural water systems— that similar levels of financing would be required for the next thirty years to cover the need, and that it did not seem in USAID's "competitive advantage" to continue in the face of such need. More concretely, because of lack of leadership (or whatever), the water component had come to take

[3] One of the authors of the Sector Analysis, Dr. Al Bartlett, finds himself in the peculiar position of having been one of those instrumental in justifying the close-out of the water component in 1995, while at this time participating in the Final Evaluation which will recommend that the activity be restarted. Times change.

over the community participation aspects of CCH, i.e., whenever anyone in CCH talked about community participation, it was only in the context of water system construction.

Based on this evaluation team's findings, the water component filled a great need and is a highly sought-after intervention. Numerous times during the evaluation team visit, community and municipal authorities expressed a hope that the new project could provide assistance in water system construction, as did CCH. Beyond that, development literature is unequivocal that the public health impact of a well-constructed water system is great, perhaps second only to vaccinations in Cost/Benefit, and that it is difficult for solid, sustainable community development to take place when a reliable water supply is absent. The corollary of this fact was made clear in the team's trip to the community of Muruhata in the Valles Altos of La Paz. Here, the CCH built water system has continued to provide high-quality, uninterrupted service for five or seven years. Pooling together the proceeds from the monthly tariff charge of Bs. 3 (US $0.60), the community negotiated with the Municipality a co-financing arrangement for the construction of a community health post. Once the health post was built, the community negotiated with the MOH that a full-time nurse auxiliar be assigned there, and that individual has been living and working in the village for the last six or nine months. This is exactly the kind of "bottom-up", grass-roots impact that represents the best of development theory and practice.

CCH follow-up to the water component is also worth mention. In one of the three departments, the evaluation team was presenting with a presentation of how CCH staff have continued to interface with communities where water systems were built. In this area (at least), a CCH staff

visits the thirty-or-so CCH-built water systems, as well as non-CCH built water systems about once every three months: to meet with the Water Committee; to follow-up how monthly collections are going; to talk about using accumulated funds for other development purposes. Beyond that, after major storms or at the close of the rainy season, this individual visits each system and takes water samples to test for biological contamination. In 25% of the systems, some sort of biological contamination is found, indicating a pipe break or contamination at the source. This staff person then helps the community organize to repair the break in the pipes or otherwise bring the water quality back up to standard. This is one of the finest examples of long-term follow-up that one of the evaluators has seen in his twenty-plus years in water programming.

Also being discussed at this time are two other innovations: CCH "marketing" this service to large-ish, municipal water systems in CCH project areas and perhaps charging for the service; and CCH/MOH staff beginning a campaign of environmental inspection of food establishments to require certain minimal standards of hygiene in such eateries. This, indeed, would be a boon to public health in Bolivia where such concepts are all-but unheard of.

Finally, a discussion of CCH's water programming cannot conclude without some mention of the *Agua Claro* project. In summary, in recognition that water system construction is too expensive to envisage for the entire rural countryside, CCH embarked on a project to manufacture and distribute five-gallon jugs of water treated with a sodium-chloride disinfecting solution. The jugs cost Bs. 32 to produce and are sold for Bs. 35 (US $6.50); the sodium-chloride solution, produced locally with an innovative technology that produces sodium-chloride through

electrolysis of common table salt and water, sells for Bs. 2.00 (US $0.33). Thirty thousand (30,000) of these jugs have been manufactured and are supposedly ready for sale (though there is some confusion about whether they are really ready or not). The evaluators judge that this innovation could be a wonderful program response to the start of the Cholera season at this writing.

5.3.5 Additional technical areas: Malaria, Tuberculosis and Epidemiologic Surveillance

The current project has come in for criticism at times as "lacking focus" and "responding to every Tom, Dick and Harry financing that comes down the pike." To a certain extent this has been true. (A greater flaw to the evaluators' way of thinking is the lack of *integration* of these piggy-backs into mainstream programming as has been described above in the "piggy-back" section.). However, the evaluators think such criticism is a little off-target. While the project must avoid becoming extended across too broad a range of technical areas, it should have some programmatic response to the most important public health needs of the rural Bolivian population. With this paradox in mind, however, the team recognizes that there are a limited number of additional technical areas that would be worthwhile considering, specifically ones that respond to USAID's new Infectious Diseases initiative and the funding that supports this initiative. These are malaria, tuberculosis and epidemiologic surveillance.

5.3.5.1 .Malaria

Malaria is endemic in some parts of the country, and malaria outbreaks are occurring in other areas, possibly due to extension of the range of the vector, exposure of non-immune populations during migration, seasonally migrating labor or other factors. Reportedly, in the Amazon basin area, *falciparum* malaria -- the most deadly form -- exists. The incidence and disease burden are not as high as in African countries, but still are significant. It is likely that the same groups that experience the most severe effects of malaria in Africa -- infants, young children and pregnant women -- are similarly affected in Bolivia. Based on this information, it appears that a new project might provide an opportunity to apply or adapt approaches developed under USAID's Africa Integrated Malaria Initiative, especially appropriate treatment of infant and child malaria through IMCI and prophylactic treatment of pregnant women in endemic or epidemic areas. Infectious disease funding could be used to adapt, expand and evaluate these approaches in appropriate project districts. Given the relatively low prevalence compared to Africa, interventions based on impregnated mosquito netting might not be widely accepted except in *falciparum*-endemic areas and possibly in areas where other mosquito-borne diseases (such as dengue) are also prevalent.

5.3.5.2 Tuberculosis

TB is an important public health problem in Bolivia and would be an appropriate target for the new project. Substantial potential opportunity exists for the project in areas ranging from policy formulation to drug supply. One promising line of study -- and one with potential global implications -- would be to build on the work initiated by CCH staff which uses community

mobilization and participation to identify persons with possible TB (those affected with chronic cough) and supports their reaching medical services where they can be tested. The most interesting element in this approach is the use of community participation to observe and support community members with diagnosed TB in completing the therapy. A Directly Observed Therapy, Short-course (DOTS) under appropriate medical supervision is the approach recommended by WHO, but is not feasible in rural areas of Bolivia. Therefore, it would be worthwhile to evaluate the possibility that such a community-based proxy for DOTS might promote higher rates of completion of therapy.

5.3.5.3 Epidemiologic surveillance

This area represents an important potential investment at both the national and operational levels. Given the country's and USAID's investments in MIS, use of infectious diseases funds to expand this approach would be appropriate. It would be important to build on the approach initiated last year by CCH linking surveillance information and analysis to the existing health management information system (rather than developing a parallel information system for surveillance as many countries do.) At the district and municipal level, surveillance could be integrated into the local data collection and analysis capability developed under CCH. Surveillance might serve to increase local authorities' appreciation for the usefulness of information, since surveillance information is most useful as a management tool for action at the local level.

The concept of Amortality surveillance in response to the work done in collaboration with BASICS may be worth incorporating into surveillance in some sites, as a demonstration approach. However, this will not be worthwhile if it results in simply counting deaths. The approach is intended to be a tool for mobilizing civil and health authorities and communities to identify and recognize the operational problems that occur when a mother or child dies a potentially preventable death. This operational analysis is intended to lead to problem-solving that addresses critical barriers to receiving adequate care. In the absence of such a problem-solving orientation, as has been characteristic of the current project, it is unlikely that counting deaths will contribute to improved health outcomes.

5.3.6 Summary

In summary, there have been a great many add-ons to CCH during the life of the project. Some of them have brought considerable technical expertise and programming richness. The administrative burden of these add-ons was seriously under-estimated, and the evaluation team assesses that project staff have not availed of the learning potential nearly as much as they could have.

5.4 Management and Implementation Issues

This section will discuss issues related to management and organizational development, among them leadership, strategic planning, "value alignment" and organizational structure. In addition, it will also address issues regarding implementation: agility of administrative procedures, personnel management, HQ support for field initiatives, turn-around time for fund replenishment, control of fixed assets, Field/HQ relations and relations with the donor, USAID and the MOH.

5.4.1 Leadership

One of the dominant themes in organizational development literature is that of leadership: the overwhelming influence of the leader on the functioning of the team. As alluded to earlier in this report, leadership in CCH was problematic almost from the start. The original formulation was that project operations would be split between a MOH-nominated Project Director, and a Chief of Party of an institutional contractor, the consulting firm of John Short, Inc. (JS). Unfortunately, JS's first choice for Chief of Party was a candidate that, under instructions from Washington, USAID/B was forced to disallow. The mid-term evaluation discusses the fact that the replacement candidate proved to be an inadequate manager of a complex, multi-dimensional project. After a year-and-a-half, JS released this individual, but, never able to find a replacement, promoted one of its technical people into the position of COP on an "Acting" basis--for several years (!). This individual's position was naturally handicapped by not having been trained in management, by continuing technical responsibilities, and by the "acting" designation for such a

long period of time. Thus, one half of the project leadership was significantly compromised almost before the ink was dry on the grant. By the end of three years, USAID/B took the highly unusual step of not renewing the JS contract.

During this period, the MOH-designated Executive Director gradually began to fill the leadership vacuum on the other side of the hall. From an organizational development perspective, this growth of power[4] was all-but-inevitable. Moreover, this individual is reported by many to have been an extremely savvy, politically astute gentleman. CCH quickly began to mold itself into an organization that reflected this leadership style. Also, since this individual now had to respond to two masters, USAID and the MOH, it was also likely that the preferred method of operation would be to play one party off the other. It is reported that this strategy was utilized to great effect for over six years.

Two other events are widely reported in this process. First is the growth of an "empire", the hiring of dozens of staff not envisaged in the original documentation. To this day, CCH has 100 staff, a "mini-Ministry", over half of whom are based in La Paz. Second, over time, one of the dominant organization "values" became loyalty to the Director (who had hired all these people) and self-preservation first, and performance second.

This gentleman was replaced late in the grant period, approximately Year Seven, having finally lost a major tussle with USAID. His replacement was reported as a well-meaning, but ultimately

[4] as defined by French and Raven, "the manager's ability to influence another person or group"

ineffectual public health physician who was incapable in his short year-and-a-half tenure of changing organizational values which by then had become so ingrained. The third Executive Director has only been in the chair two months at this writing and will find it difficult to exert major changes in leadership style in the waning days of the project. As several interviewees commented: "it is almost as if the CCH project were born bad; it got started on the wrong foot and never got over it."

5.4.2 Strategic Planning

With CCH leadership occupied in empire-building and responding to three years of JS crises, there does not appear to have been any strategic planning which took place in the first five years of the grant.[5] A number of interviewees described the fact that CCH suffered at this time from a lack of a cohesive vision: that one of the reasons that CCH had a hard time saying “no” to all the piggy-backs was that it had no vision of what the project should be; that its response to such possibilities was always opportunistic rather than strategic. The team judges this legacy from the early days continues to the present.

[5] The evaluation team's mandate did not call for an in-depth review of reports from the early Nineties thus we cannot comment for sure on the non-existence of such a planning document, but no such document ever came to light.

The only extant strategic planning document was written in Feb. 1995. As referenced in that document, the genesis of the effort was a major program re-organization called for in Amendment # 9, signed in September, 1992, but evidently not acted upon until two years later (!). The document contains most of the elements of a valid strategic planning exercise: articulation of Mission and Vision statements, identification of Goals, Purposes and Activities, description of project strategies, etc. It also describes for the first time new roles and functions for the Executive Director and the four Technical Chiefs, under a re-organization which was then taking place.

While this Strategic Plan is well done, there are number of aspects which were never implemented, (one of the weaknesses of a strategic plan which suffers a change of leadership.) No more than two Technical Chiefs were ever in place, and the strategic themes and actions do not appear to have received any more importance under the new formulation than under the old. More strangely still, as described earlier, Amendment # 15 substantially modified the Purpose statement of the project to bring it into line with the new USAID Strategic Objectives. Evidently, since project reporting did not require major adjustments, CCH staff never took adequately into account the revised formulation, or, more accurately, continued with the formulation of project goals and purposes described in the 1995 Strategic Plan. When the project was presented to the Evaluation Team, goal and purpose statements reflected the 1995 formulation rather than the legal requirements described in Amendment #15.

5.4.3 Value Alignment

One of the principal functions of a leader (Posner., et. al.) is to espouse and transmit organizational values. As noted earlier, one principle CCH value became that of loyalty to the Director. In CCH's defense, this is not an uncommon organizational value in many developing societies, and is found with considerable frequency in Latin America. It is, however, a sign of organizational immaturity when carried to excess, or when loyalty replaces efficiency and performance as primary criterion for advancement. This seems to have been the case for most of the early years of CCH. As importantly, the charisma ("mistica") of new and exciting work, well recognized characteristics of several NGOs in Bolivia, never seems to have taken hold in CCH. From early days, the reputation of the project was of an organization with staff who were over-paid and under-energized. This is an extremely difficult legacy to overcome.

5.4.3 Salary Structure

The salary structure of CCH has been one of the three most frequent and damning criticisms directed at the project for the entire ten years (along with "parallel structure" and heavy-handed administration.) As we have seen, such criticism is fully merited. CCH salaries at most levels are three to four times what staff with similar responsibilities are earning in the Ministry of Health, and two to three times the salaries being earned in the NGO sector. This fact, well known in MOH circles, has been an indigestible bone of contention and a source of tension to the Ministry since the project began. One would hope that there was some justification at one point in the distant past that such salaries were thought necessary "to attract qualified staff," however

poorly researched and inaccurate such an argument was. In any case, a mortal blow was given any hope of CCH sustainability when this salary structure was implemented.

Frustration with CCH salaries extends beyond the Ministry. USAID reports having received numerous complaints over the years from other international and bilateral donors that the CCH salary structure has been sufficiently disruptive as to distort the market for development professionals. The second (of three) USAID project manager struggled for much of his years of supervision of the project to bring coherence to this subject and in the end was defeated by the Bolivian labor law which prohibits salary re-structuring without dismissal. USAID itself has become so frustrated with the CCH salary structure and the distortions it is causing in other projects that it is in the midst of conduction a sectorial review, with an eye toward establishing salary norms for all USAID-supported activities.

The issue of parallel structure and semi-autonomy was discussed earlier in this report.

5.4.4 Administrative Agility

The third most frequent criticism of the CCH project is heavy-handed administrative procedures and extreme slowness of financial operations. In interview after interview, staff within and outside of CCH complained about the slowness of the financial system, disruptions to programming caused by shortage of funds and/or on-again-of-again signals from the financial department. Examples abound. When one staff was hired, she didn't receive her traveling

allowance for the first four months of her tenure; an MOH nurse did not receive traveling reimbursement for the entire year while the physician who was traveling with her received his. No travel expense reimbursements were given to one regional team for three months and motorcycle purchases and delivery were agonizingly slow. Several municipalities threatened to renege on local contracts when CCH failed to fulfill its financial commitments and there were uncountable interruptions in the supply of inputs. Reimbursement of cash impress funds to the regions takes months, the system evidently being that all three regional advances must be reconciled at the same time, rather than each department canceling its advance individually. Numerous “piggy-back” organizations, while grateful for the administrative convenience of the CCH umbrella, quietly comment that their operations have been slowed on numerous occasions by slowness in the CCH bureaucracy. There were frequent comments from field staff about local initiatives which were squashed "because there were no funds", among them a proposal to fund a district MOH get-together to discuss new project strategy development; and staff being offered free international travel to attend a course and having the proposal shot down by the accounting department.

Some of this has historical roots. Before CCH administrative structures were well established, a number of purchases were made and equipment distributed without adequate asset controls in place. This caused a disastrous first audit, with numerous Audit Findings. Moreover, on the PL-480 account during the Chagas program, a large number of expenses for travel costs were not adequately documented, with the PL-480 Secretariate refusing to replenish the CCH account for almost a year, resulting in the all-but-closure of that program activity for a significant period.

Also, the CCH Accounting Department make reference to changing, and always complex, USAID accounting regulations and USAID going back and forth regarding the availability of funds at different times during the life of the grant. (One vivid example is that the project's 1998 Annual operating budget was approved only on March 31, 1998 and funds were made available on May 19, '98 [!]). The evaluation team is cognizant of the validity of many of these observations. Nevertheless, at a joint meeting between the USAID and the CCH Accounting staff called by the incoming USAID project manager in 1997, it became clear that the CCH accounting staff were representing as "USAID policy" a number of issues which were CCH self-imposed, not USAID regulations. In the evaluation team interview with the CCH Controller, it was brought to his attention that most of his comments reflected a "we/they" attitude, CCH accountants being the "we", and the CCH program staff being the "they." It is the evaluation team's assessment, shared by USAID, that much of this over-scrupulousness has been self-imposed and has hindered the successful implementation of the project.

See also the section on Budget and Financing which follows.

5.4.5 Sense of Team

Personnel management in CCH is weak. There was a quite limited sense of "team" perceived by the evaluation group; it is noteworthy, for instance, that everyone in the Head office sits behind closed doors all day long. The institutional diagnosis of 1996 is a devastating commentary on this theme and CCH interviewees report that the last team building workshop was held in 1994

(!). This is not the way to create a sense of shared vision. Headquarters support to the departmental offices was similarly weak, with a number of complaints about lack of supervision, lack of interest in field affairs, overly cumbersome reporting requirements, frequently changes in reporting instruments always requiring an "immediate" response. Over-bureaucratization of administrative procedures was commented on by a number of interviewees, both between CCH and USAID and between the CCH HQ staff and the Departments. One interviewee commented "CCH became the mirror image of USAID: hundreds of letters written from one to the other over matters that could have been settled with a telephone call."

5.4.6 Donor Relations

Relations with the donor have been stormy for a significant part of the grant, though in fairness, not all of this as attributable to the current CCH staff. Mention has already been made of the first three difficult years, during which time USAID took the decision not to renew the John Short contract. Beyond that, project activities virtually shut down for nearly a year in from 1995 to August 1996, because of the serious contract dispute between the USAID project manager and the CCH Director. Only in the last two years has the CCH/USAID relationship been brought back to a more even keel. For a project that is as important to the US Government and to the GOB, it is remarkable that the situation was allowed to continue along such a self-destructive course for such a long period of time.

5.4.8 MOH Relations

Relations with the Ministry of Health have also had their ups and downs, though perhaps not as dramatically as with USAID. For many years, there appears to have been a love/hate relationship, with the CCH salary structure and well-heeled operations being a source of friction. For much of the middle years of the project, CCH operations drifted into a "they don't know what we are doing and don't care" on each side. Only with the arrival of the new executive director does this mistrust and grievance holding seem to be turning a corner.

5.4.9 Summary

CCH management has suffered a number of significant weaknesses almost from its inception. Some of this was caused by mis-steps early on which were never corrected. Much of it seems caused by strong personalities taking the project in directions which didn't have the best interests of the project at heart. In a new project, it will be essential to start out on a better footing so as not to re-live this unhappy legacy.

5.5 Outputs, Outcomes and Results[6]

5.5.1 Outputs

The CCH project staff report a large array of project outputs.

- In Programming, project staff talk about delivering services to 11 districts, 87 municipalities, 342 MOH facilities and over 1 million people. This is clearly "catchment" population rather than actual project beneficiaries.

- In Water and Sanitation, 98 systems have been built benefitting 127 communities and 37,943 people; 6,890 latrines have been built; 4,472 educational events were directed to over 40,000 attendees; 1855 training events were directed to 7,724 people. Apparently over 30,000 *Agua Claro* water jugs are reportedly ready for distribution.

- In Education, data presented to the Evaluation Team indicate that approximately 38,000 people were trained in themes of child survival in 1996 and 77,000 (?) in 1997. In

[6] Nomenclature in the field of Evaluation is notorious problematic, and not infrequently fickle! As used in this report, "outputs" refer to numbers of tangible, countable things produced by the project: numbers of people who attended training sessions, for instance. "Outcomes" are the effective learning that participants took back to their homes as a result of the course work. "Results" are the effect of the training, the behavioral change which comes about caused by the outcomes.

themes of integrated attention to the mother, staff report approximately 21,000 trainees in 1996 and 38,000 in 1997. In epidemiological subject areas, there are reports of 7,000 people trained in 1996 and 23,500 trained in 1997. The project reports hundreds of community health volunteers trained in diarrhea, pneumonia, family planning, etc.

- In Sexual and Reproductive Health, the project reports the distribution of 680,000 tablets of iron sulfate in 1996 and 1.37 million in 1997. It reports 3292 PAP smears taken in 1996 and 7,156 taken in 1997. It reports 1,049 new users of IUDs in 1996 and 1,562 new users in 1997, etc.

- In Chagas, 4,000 houses in 39 villages were re-built or otherwise treated to diminish the infestation of the vinchuca bug. One hundred and fourteen community workers were trained in Chagas themes, and the cost of house treatment was reduced from an original $390/house to $45.

- The information system could generate dozens of outputs of a similar nature: children with 1, 2nd and 3rd doses of DPT, anti-polio, measles and other vaccination coverages; thousands of children treated for diarrhea and other childhood illnesses; hundreds of women who received 4th or 5th prenatal control; thousands of condoms distributed; thousands (millions!) of oral re-hydration salts distributed.

As indicated by the question mark above, (?), and by the data themselves, it appears of limited relevance to spend much time narrating such statistics, laudable as efforts to collect them may be. In fact, the ET is of the opinion that project spends far too much time in "bean counting." Summing numbers has little to do with quality, as evidenced by the following observations.

The Education department is incapable of telling how many of those supposedly 77,000 people trained in child survival in 1997 were repeaters: whether one course was given to 77,000 people once, or whether several thousand (how many?) attended a number of courses on the same subject matter. Also in Education, it seems patently obvious that double, triple and quadruple counting is taking place when ones adds all the courses together. Most tellingly, there has been little project effort to measure how much *learning* took place in these courses: very few of the workshops received follow-up.

In Reproductive Health, we have already seen that the utilization rate of iron sulfate is an open question: the project has no way of knowing how many of the million-plus tablets distributed were actually consumed.

In vaccination coverage, the results are confusing. As narrated elsewhere, the project has reported to USAID that high levels of vaccination coverage have been achieved. In some Departments this may be true; and in measles and polio, it is true. It is less true in DPT-3 where the 80% DPT-3 coverage routinely reported is not fully accurate. In fact, the project has achieved 80% of its yearly *targeted* DPT-3 coverage, not the same thing at all. CCH regional

staff are aware of this discrepancy and are able to calculate quickly what the real rates of coverage are, which vary from Department to Department, and from seasonal migration to migration. However, reports that are generated and the charts that fill the walls of the district headquarters, are based on the what project thinks are realistic targets for coverage. In point of fact, effective, *real* DPT-3 coverage in CCH project areas, as reported by Cochabamba MIS staff and corroborated by La Paz MIS staff, is under fifty percent. This discrepancy is of urgent importance, since in regard to DPT-3, the country and CCH districts appear to be acting as though they have 80% coverage, when in fact coverage is much lower. This results in the donor, the MOH and the local municipal health committees being mis-informed of the real health status of the people.

5.5.2 Outcomes/ Results

Notwithstanding the observations above, the project has some bonafide successes. Vaccination coverage is up in project villages, and up in the country as a whole, with the result that infant mortality indices have fallen dramatically over the life of the project, --from approximately 150 at the start of the CCH, to 87 in 1997. This is a dramatic public health accomplishment in a short space of time, (though most of the gain has taken place in Santa Cruz in areas indirectly influenced by CCH activities with CCH-financed vaccines.)

Another success is the provision of *safe* water. As reported earlier, in at least one district, the CCH water staff have undertaken a regime of routine water sampling and have determined that

up to 25% of the systems require maintenance— which was then effected. Results in this area, thus, are that pure water is being consumed by the target population. In other areas, the results evidently are less notable, since the water component reports that only 34 (of 96) water committees are functioning adequately, and only 67 systems are classified as "good quality" and latrines are self-reported as "well installed" in only 52% of the cases. When the Environmental Health Project conducted an evaluation of the CCH water component in Dec. 1994, it found that all five of the CCH systems inspected had "good" water.

A third outcome, not quantified as yet, is that MOH staff are, in fact, traveling more than they ever have in CCH districts, and providing health services to segments of the population that would not have been served previously. Similarly, there is better radio communication between health posts and the district authorities and district hospitals, with better follow-up than ever before.

In the area of impact monitoring and assessment, the new project will have to do a better job of tracking its progress than the current project has. Moreover, it is important in the new project that a real base-line study be done. CCH documentation speaks of "base-line data collection" but the follow-up effort was haphazard and of low quality. When supposedly mid-term comparisons were made, there was no re-visit of the original areas where baseline had been collected. Instead a number of 'comparative districts' were selected against which 'changes' in CCH districts were imputed. This was really an effort undeserving of a project that is investing $33 million. Money and time should be set aside in the new project so that real baseline data can be collected, even if

by non-project data collectors, so that real causation can be determined, with "with/without," quasi-experimental rigor.

6.0 PROJECT BUDGET & FINANCES

As is normal in USAID projects, the budget has undergone numerous revisions, amendments and amplifications. As is also quite common, a discussion of Budget and Finances could take pages of text, including a detailed summary of each of the yearly audits. The purpose of this brief discussion is different: simply to give the reader data on the overall budget, the overall implementation of the project from the financial side and to provide some broad contextual comments on where monies were spent. For more detailed reviews, the reader is referred to the Yearly Audits.

The Life-of-Project budget for CCH is $33 million, $ 9 million from the Title-III Secretariat and $24 million from USAID; of the USG funds, 39% was managed by USAID and 61% managed by CCH. While Life-of-Project spending will not be fully known until after the project closes, several observations can be made. CCH-controlled expenditures have been a source of under-achievement for much of the life of the project. Figures are as follows:

Table One: Expenditure Patters in CCH's USAID Account

Year	Expenditure	Comments
1989	74%	100% expenses accounted for in 'district development'
1990	68%	60% expenses accounted for in immunizations

Year	Expenditure	Comments
1991	54%	91% expenses accounted for in ‘district development’
1992	82%	widely mixed expenditures
1993	81%	widely mixed expenditures, incl water @ 35%
1994	72%	widely mixed expenditures, incl. water @28%
1995	17% or 38%	See narrative below
1996	57%	
1997	77%	

At no time did project expenditures ever reach more than 82%. In several years it was below 60%. Excluding 1995 expenditures (discussed below), overall spending efficiency is 69%.

Spending by category of USAID monies:

According to information provided by the USAID Controller’s office as of Dec. 31, 1997, expenditures by category of the funds under CCH control are as follows:

Insert Fred here

(1) Decentralization represents the largest single expenditure category at 46%, relatively on target compared to budget. (2) Administration comes next at 22%, somewhat over-expended compared to budget. (3) Vaccinations comes next at 16%, under-expended to budget. (4) Water and Sanitation represents 11% and is over-expended compared to only 5.5% budgeted. (5) The importance of Chagas is under-represented by these data, since Chagas was largely financed from the PL-480 account which is not reported in these figures.

Expenditures of USAID monies in 1995

It will have been noted from Table One that 1995 figures show a dramatically low level of expenditures. It was during 1995 that the conflict between the USAID Project Manager and the CCH Executive Director came to a head. By all accounts, during much of the year, the project

was virtually stopped in its tracks. Of the approximately $5.7 million originally budgeted for that year, (reported after the ET's departure to have been reduced to $2.4 million), a little over nine hundred thousand was actually spent, half of it on salaries. It is not all that unusual that the two individuals were removed from the project as a result of this state of affairs. It certainly left a legacy of under-achievement that project staff in the remaining years of the project have had difficulty in overcoming.

Title III Expenditures

Funds from the Title-III Secretariat were expended at approximately 100% of budget, to Feb. 1, 1998 $8.5 million of $ 9 million budgeted. Though there were reports of a significant clash of organizational culture and accounting systems between the Secretariat and the CCH project in the early years of the Chagas project, by the end of the program, expenditures had been brought under control.

In summary, over the long term, CCH has had a checkered history in terms of administrative and financial efficiency. The Title III account is the one funding source where expenditures have been accomplished to satisfaction. In the other account, financial performance has been relatively low.

7.0 FINDINGS

On the basis of the team's field travel, document review and interviews, the following are key findings.

7.1 Ministry of Health facilities, health posts, hospitals, etc. suffer from low utilization.

The first observation of the evaluation team is that MOH facilities in CCH areas suffer from low utilization by the rural population.[7] In visit after visit, the evaluation team was presented with statistics that showed three or four, six or eight patients per day at the rural health posts. This is in areas where the "catchment population" according to the MIS information system and the DHS is two to five thousand.[8] In one department, CCH staff have worked closely with the MOH to design a "Registro Unico," an attendance register, which shows at a glance how many patients have been attended to during a week, month or year. The team judges that the "Registro Unico" seems to provide a considerable help to the nurse auxiliar in more quickly filling out end-of-month reports while at the same time streamlining the auxiliar's day-to-day administrative

[7] This is not a new finding, but rather has been confirmed time and again by almost every evaluation conducted on the rural health system in Bolivia. Indeed, it is widely reported that this is a characteristic of the entire MOH rural system, but clearly that observation is beyond the Scope of Work of this evaluation group.

[8] The situation in the one or two "second level" hospitals the teams visited is less clear since the team did not focus on this level and did not evaluate efficiency at this level of care.

chores. The team recommends that this form be widely diffused in a new project. The form also shows at a glance how under-utilized the health posts are.

This underutilization has been widely studied and reported on. Indeed, many of the elements to be discussed below were discussed and analyzed in CCH's own Strategic Plan, 1995-1998. Though there are many elements, the ones the ET consider to be most important are those described below.

7.1.1 Access Problems

One principle problem to prevent more people from coming to the health post is the geography and sheer size of Bolivia. Throughout the evaluation process, there were numerous accounts from the rural populace of the health post as four, six and ten hours horseback ride from the community. Since this problem will not go away, strategies must be created to deal with geographic isolation.

One idea long under discussion and some pilot efforts is to strengthen the corps of community health volunteers, sometimes also identified as RPS's "Popular Health Responsables." In some Departments, CCH has been working with these volunteers, particulary in training; the Cochabamba CCH staff has been particularly forward-thinking about issues involving the RPSs. One of the ideas that the Cochabamba team is developing (also not new) is the creation of "botequines populares", kits stocked with frequently used medicine, which would be handled by these RPS in their village. Perhaps the kits could be stocked initially with financing from the new project and financed over the mid and long-term through a revolving fund. The

Cochabamba team's experience is illustrative of several problems with this approach, however. First, many RPSs' ability to read and absorb "book-learning" is low. Skills that make one an energetic leader, committed to the development of one's community, do not necessary coincide with the ability to absorb complex health information. This makes the job of training such volunteers complicated. Also, it means that the level of service which the system can legitimately plan that these people provide will, perforce, be basic: first-aid, breast-feeding promotion, oral re-hydration salt distribution, perhaps some family planning commodities distribution, perhaps some snake bite kits, perhaps some emergency splints are probably as ambitious as one should plan for at this level.

A second problem is "volunteer fatigue" or migration, and again the CCH Cochabamba team has provided important data. Of the approximately 600 community volunteers exposed to some training over the last four years, from fifty to sixty-five percent of them were not working 12 months later. Some had assumed different (political) responsibilities within the new decentralized municipality structure; some had emigrated; some had simply gotten tired of working or had not absorbed enough course content to create the demand in their villages for their services. Clearly any program that is aimed at the RPSs must take into account a high level of fall-off and the need to create incentives for the individuals to continue to serve.

Botiquines are one such incentive— perhaps coupled with a small profit margin on the sale of medicines so that there is some financial payback for the hundreds of volunteer hours invested in the community. Another idea, which evidently CCH has experimented with though the evaluation team did not hear of it during its field travel, is the provision of bicycles to allow these

people to move around their villages more easily. However, instead of giving the bicycles as an incentive for future performance, the evaluators recommend that it be given for past performance, i.e., at the completion of one year (say) of successful service to the community. In addition, as is the case when a senior MOH person receives course financing, the bicycle could become the property of the RPS at the conclusion of two addition years of volunteer service; if the two years are not completed, the bicycle could be re-possessed by the Municipality (through whom the original offer would have come.)

For the nurse auxiliars, the issue of mobilization is also important. The current CCH project has provided a number of motorcycles to auxiliar staff, and the evaluation team concurs with the majority of people interviewed that this input has proven of tremendous importance in the improvement of service delivery. Each auxiliar in the MOH system should have a motorcycle to help him/her get around, and as a prize for good service. A similar two-year service commitment could be negotiated in the delivery of such an input.

At the physician level, there has been some innovation taking place in delivering pick-up trucks to District level MOH facilities, and this too has proven an important benefit. Physicians and auxiliars are traveling out of the health posts with more frequency than before, in the best of cases once a week, providing considerable outreach. Moreover, some experimentation is taking place with “health fairs” on market day, the doctor and the nurses going to the local market day to attend to the hundreds of people who come to the market weekly but who would have a hard time making it back to the health post on non-market days. The mobilization provided by the pickups has been an important factor in allowing MOH personnel to do this.

Finally, CCH has for some years financed the provision of travel allowances for MOH personnel and reimbursed gasoline costs. Both of these interventions are worthwhile strategies and should be continued in a new project. The criticism that this is an "unsustainable" intervention perhaps has value; however, the creation of more demand for MOH services, in the economists' demand/supply curves, may make the sustainability issue less important than it otherwise might be. Over the long term, one could hope that with the creation of sufficient demand, municipalities could become interested in assuming responsibility for such costs, simply because so many people are being benefitted by the service.

7.1.2 Low quality service

A second important factor in the low utilization of MOH facilities is, frankly, that the quality of the service is poor. It is little wonder that people do not want to attend MOH clinics when they are required to introduce themselves to a fresh-out-of-school doctor every six months; when the attention they receive is poor (and even sometime overtly racist); when the health post is disorganized and/or dirty; where the physician or the auxiliar really do not know very much about what they are doing. Among the issues the ET evidenced are the following:

In Bolivia for many years, there has existed the system of the Año de Provincia whereby freshly-graduated physicians are sent out to provide a year of service to rural communities as a partial repayment to the nation for their years of education. In theory, the idea is laudable; in practice, it

has foisted on the rural population a cadre of wet-behind-the-ears, newly book-learned, city-oriented, (frequently) disinterested and uncommitted "vacationers." If the criticism seems overly harsh (and, indeed there are some exceptions to this pattern[9]) in general the observations are correct. One knowledgeable informant went so far as to say that the biggest scandal of the Bolivian health care system is that newly graduated physicians get a year to "practice" on the rural population; he went on to say that if a new project accomplished nothing other than doing away with the Año de Provincia, it would be worth $35 million. Others are not quite so outspoken but there is nevertheless a consensus in much of the Bolivian society that this idea has outlived whatever its original usefulness. To CCH, what the Año de Provincia has meant is a steady stream of newly arriving physicians whose orientation to project goals, to public health, to cultural mores, has to be repeated year after year after year. Indeed it is a fairly common problem in CCH districts that these newly graduated physicians will spend considerable time and energy looking for any excuse to spend time in the Departmental capitals in "training," "orientation" or administrative processing in order to lessen their time in the health posts To his credit, the new Minister of Health has recognized the weaknesses of this system, and in the Strategic Plan (P.E.S) calls for the gradual phase-out of this system. The new project could build on this initiative.

[9] The team had the rare pleasure on one of its trips to meet an Año de Provincia who fulfilled the very best of what such a person should be: energetic, caring, committed; working hours late into the night on Sunday night; investing her free hours in paining the clinic and repainting the beat-up equipment; lobbying with the mayor (who at first complained that he had hoped for a man for a man's job) for more funds to fix the health post up; converting the mayor into one of her staunchest supporters in the course of several months. Meeting this young woman and seeing her dedication and work ethic was one of the highlights of the team's field travel.

Another factor in the generally low-quality service provided by MOH staff is that standardized norms and procedures are not being implemented for the treatment of most diseases. This is not because such norms do not exist. In fact, the evaluation team was shown what was reported to be a comprehensive manual of procedures published by the MotherCare project several months ago, and distributed to over 10,000 MOH practitioners throughout the country. Unfortunately, the team did not see this manual being used in any of the health posts visited. One manual the team did seen in use for surgical procedures, was published over twenty years ago (!), giving further evidence that the issue of standardized procedures needs to be worked on.

A related issue is supervision provided by senior levels of MOH staff, District directors, Departmental Heads and La Paz staff. The team heard a number of observations that (1) health facilities that are difficult to get to receive very few supervisory visits and that (2) those which are situated along the highway get visited all the time, frequently with a "tourism" kind of supervision: rapid, cursory and only focused on one issue. (A not dissimilar observation will be offered regarding some CCH La Paz supervisors.) The team ventures the opinion that one reasons that norms and procedures are not standardized is that MOH field staff receive inadequate medical supervision from supervisory staff.

It is also true that the nurse auxiliars are burdened down with administrative reporting chores that take away from their time to provide health services. The team developed the half-formed opinion that health post staff spend an inordinate amount of time filling out reports, and that

administrative systems are weak to help them get through this chore expeditiously. [10] Mention was made elsewhere of a simple "Registro Unico", an administrative tool that CCH Cochabamba staff developed, which helped simplify this reporting burden.

Another element in low quality service is that newly graduated physicians are primarily trained in curative medicine, not in public health. Mention has been made of the need to orient newly arriving doctors to the principles of public health in order to lessen the "top-down" formation of these newly arriving doctors. (Cochabamba physicians may be an exception to this rule, because they do receive some course work in public health before they graduate. The team was unable to form an opinion whether there is a significant difference in Año de Provincia staff in Cochabamba and the other departments.) The Cochabamba curriculum could be studied to see what could be applied elsewhere.)

One factor contributing to low quality service is that there is little opportunity for professional growth at the MOH nurse auxiliar level. As one interviewee put it: "once an auxiliar, you are an auxiliar for life." CCH has spent some laudable energy in the last several years in providing additional technical/ medical training to this staff, but it is still a dead-end job. If the MOH were in a position to create a career ladder for auxiliars, with promotion to a higher salary level based on completion of additional training as well as longevity of service at the health post, it would

[10] One of the evaluation team recalls a CARE Bolivia study in the early Nineties which indicated that *every single item* in the MOH reporting system represented over $100,000 in instrument design and pre-testing costs, data collection costs, processing time, supervisory , analysis and reporting time.

possible for the auxiliar to grow professionally. Indeed, a not-dissimilar opportunity exists for such in-service growth in several CCH departments where third-year specialists (in gynecology, pediatrics and surgery) are providing four-month service as part of their residency requirement. Auxiliars could be assigned to these physicians to learn from them. Perhaps it is not too ambitious to think that within a period of five years, say, a nurse auxiliar could receive sufficient advancement and training to quality for promotion, or earn the right to study for a registered nurse liscense. A new project could help develop such a model and experiment with it on a pilot basis and, indeed, the Minister of Health's P.E.S. calls for the creation of new 'medical careers' along these lines.

7.1.3 Cultural barriers

In a society as richly indigenous as Bolivia, there are a number of cultural barriers that interfere with the delivery of quality health services. First, there is a natural self-effacement in the indigenous population when faced with Western medicine. Second, many newly assigned MOH physicians do not speak the local language (and, assigned for less than twelve months, have little inclination to study it either.) There is sometimes a second-class status that is assigned to native women by city-dwellers. The evaluation team saw an MOH service provider who was an out-and-out racist— telling indigenous women to "come back tomorrow" while treating the Latin population as they walked in the door. Though thankfully such outright discrimination is not common, there is a more subtle form that, perhaps, is quite a bit more common.

Within Western medicine there has been, till now, little place for traditional customs. Numerous examples were reported during the evaluation team's interviews. Providing a thick chicken soup, *caldo*, to the mother immediately after the expulsion of the placenta usually does not occur in health posts though it is a strong tradition in indigenous cultures. MotherCare's report of the existence of strong traditions regarding "hot" and "cold" aspects of pregnancy and delivery was confirmed in ET focus group discussions. The traditional squatting position for delivery is favored by indigenous women while Western medicine (and many MOH physicians) continues to use stirrups and the obstetrics table. Focus groups report that in traditional cultures, the birth of the baby is followed by a big party, where neighbors come from all around to celebrate; in MOH posts, the mother is frequently shut off in a dark room and isolated from everyone, (sometime even from the baby) till she has a chance to recover.

Finally, indigenous women rarely, if ever, undress, even when bathing. To be required to put on a hospital gown, to enter the anonymity and coolness (even air-conditioned as the team saw in several clinics!) of the delivery room, and to have to show themselves to male physicians is an act of acute embarrassment for indigenous women: the word they used in Spanish is "ashamed."

These brief paragraphs have only scratched the surface of what are a deep and complex issues. Reference is made to the MotherCare project which has brought this issue to the fore in some of its quality obstetric care discussions. The evaluation team did not get the sense that CCH staff had done very much work on these issues.

7.1.4 Few women in positions of MOH responsibility.

The issues of few women in the MOH takes place at all levels,[11] but the need is particularly acute at the service delivery level, in part, for reasons described in the paragraphs immediately above. The team saw very few women supervisors at the District level. The nurse auxiliar corps is (surprisingly) staffed apparently by 70% or so men, and 30% women. The cadre of community promoters seems, if anything, to be 90% men and 10% women. Meanwhile, women service providers, physicians and auxiliars, have more access to indigenous women because of their gender. The Evaluation Team is pleased to hear that the current crop of Año de Provincia physicians is approximately half men, half women; this is clearly an encouraging development. A new project could make a special outreach effort to attract more women: to fill project area positions with women doctors; to create nurse auxiliars training programs for female candidates and "market" the program to municipalities; to aggressively promote female community promoters.

7.1.5 Low motivation in MOH staff

Some of the field trip interviewees are among Bolivia's unsung heroes and heroines: dedicated, hard-working, "connected" to their villages. In general, however, MOH staff suffer from low morale. Several reasons for this state of affairs have already been described, low supervision and little chance of career advancement. Numerous other reasons were cited in the field trip

[11] The Evaluation Team notes, not without a sense of irony, that it its meetings with the Minister attended by at least fifteen senior staff, the only woman MOH representative in the room was the Director of CCH.

interviews: (1) quite low salaries; (2) a cultural pattern of "vertical" supervision, criticizing and paternalistic; (3) inadequate medical equipment in the health posts; (4) inadequate housing for physicians; (5) no reward system-- neither monetary nor non-monetary, and no system to receive praise for a job well done. In one area, CCH has been instrumental in improving morale and service: the project's financing for vehicle fuel cost and for MOH travel per-diems have proven a valuable and important use of resources. On the other issues, however, the project has not exercised much influence. The Minister of Health's P.E.S. includes a recommendation for MOH salaries to be increased which a new project should clearly support, but many other non-salary issues could also be experimented with in project areas.

7.1.6 Inadequate provision of medicines

The last item to be discussed briefly regarding low quality service delivery is that in many health posts, the supply of basic medicines continues to be unduly erratic. Clearly, even if all of the above conditions are improved, with the most attentive and culturally sensitive care, even with highly motivated staff, if medicines are not available, quality attention will not be possible. CCH has done some laudable work in this area, in the creating of an all-but-self-financing rotating fund of medicines reported in Samaipata and seen in Patacamaya. The project has not done an adequate job in exploiting this learning and diffusing it throughout CCH project areas.

7.2 The CCH project has suffered from and unduly burdensome and unresponsive administrative structure

This point will not be belabored unduly; it has been described above in the "Management and Implementation" section and in the "Budget" section. The project suffered through a series of mis-steps which have already been described.

Regarding staffing, we have noted the original mis-conception that overly high salaries would be required to attract staff. We noted the leadership vacuum caused in the early days by unsatisfactory institutional contractor performance. We noted the explosion in hiring new payroll in the early Nineties, perhaps without adequate justification for what all these new people would be doing.

Administratively, we noted that the first Audit was a devastating indictment of project efficiency: one of the Findings (albeit one in which current staff played little role) has not yet been resolved five years later. Subsequent Audits showed improvement, of course. In addition, in the early Nineties, program staff spent in an accelerated fashion in their enthusiasm to push the Chagas project without having established adequate administrative procedures to track such expenditures. The result was that a PL-480 project advance could not be adequately reconciled and the program came to a screeching halt.

The end result of these and other factors is that the Accounting Department has come to view itself as the "keeper of the flame," the entity that has held the project together in spite of all obstacles. In the judgement of the ET, it does not view itself as one of the team players, but rather, as the one entity that must control all the others. One interviewee said: "they manage the project finances like a secret." Comments abound from almost all interviewees of weaknesses

such as: shortfall of funds; programmatic promises made but not kept; program initiatives denied; program budgets "frozen" with frequency; erratic supplies of medicines and chemicals caused by financial problems; unduly onerous reporting requirements (beyond those required by USAID); rigidity and slowness in the reconciliation of advances; slow payment to vendors; even "punishing" (*castigante*) supervision.

The centralized decision-making and project controlling that may have been appropriate at one time in the current project, is no longer providing the kind of flexible, program autonomy and decentralized authority that a new project will require.

7.3 Important Project Successes

The CCH project has produced a number of important successes, some of them detailed in the preceding narrative. Most of these are replicable in a future project. Among the most salient are the following:

- Establishment and functioning of an all-but-self-financing rotating fund for essential medicines
- Establishment of good departmental teams of educators
- Utilization of good community education methodologies including the (decentralized) Centros de Capacitación Integral (CCIs) in Villa Tunari and Ivirgazama and the AEIPI training in La Paz and Cochabamba
- Some satisfactory experience with promoting mothers' clubs

- Good relations with the MOH at the district and health post/ hospital level
- Good relations with the new mayors and the decentralized municipal structure; good perception by these people of the importance of the project
- Some experimentation with community diagnostic tools
- Innovative Management Information System, appropriated tied in to, and supportive of the National Information system (SNIS)
- Good identification and staffing up of regional (departmental and district) CCH teams
- Good utilization of resources in the provision of motorcycles, cold-chain equipment, radios; good resource use in providing traveling expenses and vehicle fuel reimbursement
- Acceptable training provided to nurse auxiliars and promoters: (good what there was of it)
- Good innovation in the design of simplified administrative forms and procedures to help auxiliars better organize their paper work requirements
- Decentralized experience in Information, Education and Communication (IEC) and local radio broadcasts
- Good pilot activities in the Agua Claro water jugs and in insecticide-impregnated mosquito nets

7.4 Important Program Weaknesses

The CCH project has demonstrated a number of important weaknesses in the preceding narrative. Among the most salient are the following:

- The Family Planning/ Reproductive health add-on came too late to accomplish anything significant and it was unrealistic to expect much to be accomplished in such a short space of time.
- A similar observation is appropriate regarding expansion to 11 districts which began in 1996, and has accomplished little.
- Quality of data in the Management Information System is doubtful, making analysis and decision-making based on the MIS suspect.
- Few CCH-financed workshop, of the hundreds that have been put on, have received meaningful follow-up to determine what effective learning has taken place; impact of these course is largely unknowable.
- IEC has been unduly centralized in La Paz and insufficiently responsive to departmental /district needs. Moreover, Head Office education staff have been not been particularly energetic in informing themselves of the outputs of other important IEC actors such as UNICEF, PROCOSI and others.
- It appears to the evaluation team that CCH staff have been largely uninvolved in providing technical /(medical) supervision to MOH staff , perhaps due to a lack of clarity in roles and responsibilities.
- There is little, effective cross-sharing between the successes between one CCH department and the others; there is much program “fragmentation” as a result and little replication of project successes.
- There have been relatively few training events for nurse auxiliars and promoters, given the great demand for such training and great need.

- For a “community health” project, there have been relatively few activities directed at the community.
- For a project with a strong nutritional base, there have been relatively few activities directed at nutrition.
- In spite of considerable investment in equipping health posts, there are still some posts that exhibit decrepit furniture, utensils and medical equipment which the project could have co-financed with municipal authorities.
- In two of the three Departments, there is a relatively strained relationship between the CCH Departmental Director and the MOH.
- The project has demonstrated only sporadic outreach to NGOs and to the private sector. In one case the relationship functioned to mutual satisfaction; in others it did not. In fact, the evaluators heard from several non-CCH staff of a perceived bias against NGOs for many years.
- With one or two exceptions, CCH Head Office supervision has tended to the “tourism” variety in areas of easy access. One area of difficult access was reported “unreachable during the Rainy Season,” when it hadn’t rained for over three months.
- With one or two exceptions, the team believes CCH Head Office staff suffer from a lack of vision regarding the role of “supervision for personal growth” (*supervision capacitante*); there were several reports of “punishing” supervision (*supervision fiscalizadora*.)
- The project does not have an adequately flexible response of incipient emergencies such as insecticide pollution in the watershed and epidemic snake bites. Also, there are relatively few examples of local initiative, the evaluation team speculating that such

overtures having been stifled by overly heavy-handed administrative requirements in the past.

- Although auxiliar/ promoter course work is well appreciated by those who attended, it is likely that the events are still overly didactic and not as “hands on”as they could be.
- The success of the Agua Claro pilot has not been adequately capitalized on.
- There has been virtually no thought given to preparation of a “Phase Out” strategy.
- With one or two exceptions, there has been little integration of the “piggy-back” programs.

7.5 “Piggy-Back” Programs

There have been a large number of piggy-back projects that have accrued to CCH over the ten years.

This piggy-back arrangement has brought a clear administrative convenience to USAID, in terms of having a handy structure through which to be able to channel these addition funds. It has also provided an administrative convenience to the Cooperative Agencies.

It has proved a mixed blessing to CCH, however. It has represented the addition of highly qualified, world-class technical expertise. However, it has added, in turn, a considerable administrative burden, which perhaps was unappreciated at the time, either by USAID or by CCH. In a future project, the ET recommends that the numbers of such relationships be considerably reduced and that the trade-offs be more carefully weighed.

7.6 Water Programming

The water programming filled a great need in the current project and is in high demand in municipalities. The evaluation team will recommend that water programming be continued in the future project, but under a less operational strategy than the direct implementation which was characteristic of the current project.

7.7 Chagas Programming

The Chagas program filled a great need in the current project and is in high public health problem in rural Bolivia. The evaluation team will recommend that Chagas programming, and infectious diseases programming, be continued in the future project, but under a different program modality than the direct implementation which was characteristic of the current project.

8.0 RECOMMENDATIONS

Based on the field travel, interviews, literature and the preceding narrative, especially the Findings section, the evaluation team makes the following recommendations.

8.1 The CCH project should Close

The CCH project should be allowed to expire as planned on Dec. 31, 1998. The project has demonstrated moderate success in some areas, but not enough to merit an exception to the USAID policy that projects should never have a life of more than ten years. In addition, the administrative structure of the project has outlived its usefulness.

A majority of HQ staff should be let go in July. In a de-briefing to the CCH HQ staff on April 8, the Evaluation team made explicit its recommendation in this regard.

The process of "close-out" is one of high emotional stress. The evaluation team recommends that CCH develop an aggressive program of outplacement for departing staff and put on a workshop for them on "career transition" skills. The Evaluation team left a proposal how such a workshop could be conducted. Also left was a recommendation of several Dominican consultants with experience in putting on such a workshop. (An outline of such an event is included as an Appendix H.)

A small core of essential headquarters staff should be kept on from July to December to close out the project. Staffing of that core group was discussed with senior CCH leadership.

In so far as possible, field staff should be encouraged to remain during the period from July to December. During this time, a new project will be developed and it is appropriate and valuable that field staff experiences contribute to the design of the new project.

In the absence of a project-prepared "Phase Out Strategy," the Evaluation Team finds itself in the somewhat uncomfortable position of having to make recommendations (on the basis of limited data) on the issue of Transition strategies. After some in-depth conversation and analysis, the team makes the following recommendations:

(1) Project areas in which CCH has been working for almost ten years which do not exhibit marked levels of poverty-- or where the project has enjoyed some success-- should close without delay, July to September. These are Altiplano Valle Sur, Carrasco Valle, Chapare Valle Puna, Valles Cruceños and Chiquitanía Sur. Each of these areas has enjoyed considerable project resources for a long period of time and, simply, it is time to move on.

(2) In project areas in which the project has newly opened, the team judges there is not enough progress to merit a prolonged transition period: sufficiently little has been accomplished that the project's withdrawing from these areas is not a big loss. In these areas, too, the project should close quickly, i.e., between

July and December. These are Yungas, Chiquitanía Norte and Chiquitanía Centro.

(3) The team recommends that three areas should continue to be included in the new project, based on criteria of high indices of poverty. These are Capinota (an older area) and Chapare Tropical and Altiplano Valle Norte (newer areas.)

(4) On the issue of Pacajes, the evaluation team is equivocal: on the basis of years of exposure to CCH, there is reason to close in Pacajes; on the basis of poverty, there is reason to stay. The team does not make a recommendation in regard to Pacajes.

The evaluation team heard of several expensive program purchases (pick-up truck, staff quarters, radio purchases and lab equipment) that different municipalities allege CCH or USAID have promised. To clear up this gray area, each CCH Department staff should submit a list to CCH-La Paz of what it thinks has been "promised," and the validity of those commitments should be analyzed. It would be unfortunate for a project to close without clarifying this issue.

If there are any contractual elements still pending, they should be handled before the project closes.

The Evaluation team made a strong recommendation that CCH retain a lawyer specialized in the Bolivian labor code. There are dozens of obscure elements of the Bolivian labor code that are a

minefield for those not expert in the material. One suggestion of such a lawyer was left with senior CCH management.

The ET also proposes that a detailed list of Fixed Assets be updated and that the majority of this equipment be transferred to the Departmental level. Since there is value in transferring some of this equipment to current project areas-- to continue project activities-- as well as value in transferring it to new project areas-- to start up new activities--, perhaps the equipment should be divided up in an equitable way in favor of both new and old areas. The example was put forward that a number of the CCH computers are slow, older versions, 386s, 66 Mz., with dated software etc. whose usefulness in a new project is suspect, but which could make a great contribution at the Departmental level for years to come.

The issue of project vehicles and other pieces of major equipment is similarly worth thoughtful study.

One issue on which the ET does not make a recommendation but rather simply an observation is that it might be worthwhile to consider the hiring of a "Transition Manager," someone outside the current project to work under a fixed-service contract with no possibility of continuing on in the new project, to handle the myriad details that closing a ten-year project will entail. The team is firm in its recommendation that this responsibility not be assigned to anyone currently on the CCH payroll.

One comment bears re-emphasizing. The Evaluation Team is recommending that the CCH project should close out completely: once, for all, permanently. No administrative vestige of this project must be allowed to continue to confuse the start of a new project. (For example, it would be easy to make the mistake of carrying over CCH's *personaría jurídica* into the new project. In the teams' understanding of Bolivian law, this would cause interminable legal problems and the possibility of unlimited legal liability for the new project.) CCH must end definitely.

8.2 Develop a New Project

A new project should begin to be developed immediately. This project should draw on the successes of CCH but should be structured significantly differently. Several recommendations were made to the Minister of Health in the Team's debriefing to him on April 8th. Among them were the following:

- The new USAID-GOB project should require a semi-autonomous structure of some kind within the MOH. The issue of "parallel structure" must be avoided from the outset. In design and discussions with the GOB, it will be important to develop structures and communication mechanisms that will make the project an integral, though specialized, element of the GOB's program. The new project should be one that will, to the greatest degree possible, inform broader GOB program and policy development. On the administrative and financial management side, this semi-autonomous function will be of continued importance in accounting for USAID funds. However, this administrative

element should be lean and results oriented, and should be structured and staffed so that it is clearly a support function rather than a control function.

- The new project should carry a Spanish acronym. Symbolism is important and the symbolism of an English project title has outlived its usefulness. One acronym was proposed: PRODESCO, PROyecto de DEsarrollo en Salud Comunitario. (For convenience this acronym will be used in the remainder of the report.) Any other Spanish-significant title could also be developed.

There are two overwhelmingly important issues regarding the structure of PRODESCO:

- First, it should carry a decentralized staffing pattern. The Team recommends that no more than four senior staff be located in the La Paz Headquarters: the Executive Director and three Assistant Directors: for Programs, for Finances/ Controller and for Evaluation and Management Information. These senior people would be supported by minimal staff, perhaps two secretaries and one or two support staff. The head office infrastructure, thus would be only seven or eight people, a far cry from the fifty-person CCH bureaucracy that has been the target of such justified criticism.

  Reflecting GOB priorities, the majority of staff will be decentralized, located at the departmental, district and municipal level. A tentative configuration would be one senior physician as Regional Director and three assistants, one for Education,

one for Administration and one for MIS. (Perhaps there is justification to think about adding a Nutritionist at this level also.) It is the Team's recommendation that this staff be located in the UDES of the Departmental MOH.

Reporting to the PRODESCO Departmental staff will be District teams, composed of a financial administrator, an MIS secretary/ receptionist and other support staff.

The major addition to PRODESCO is the proposal to hire community educators for each of the municipalities in which PRODESCO will work. The team recognizes that this is a significant number of people, perhaps fifty or more. We are convinced, however, that the addition of this cadre of people will be the catalyst to achieve the "community development" the project hopes for. A thumbnail description of the roles and responsibilities of these staff is included in the last section of this chapter.

- The second key structural issues is the proposal that the salary structure within PRODESCO must be made to reflect the local market.[12] The team recognizes that this proposal represents a payroll that is less than 50% of the current scale. It will be recalled that one of the most fundamental criticisms of CCH throughout its life has been the

[12] This is a different recommendation than that presented in the Team's debriefings. It takes into account comments from USAID and the Minister. Hopefully it proposes a more viable alternative than the first proposal.

princely salaries that its staff have enjoyed and that the error of establishing such levels of remuneration were made before any one of the CCH staff were ever hired. A fair but reasonable salary system must be structured before it has a chance to irredeemably distort PRODESCO, as it did CCH.

The team recognizes that this will be an area of considerable debate: there are, after all, nearly 100 people whose vested interest is that this recommendation not go forward. The Minister himself, in the ET de-briefing, indicated that it perhaps was unwise to bring CCH salaries down to MOH parity— the ET's first choice. Rather, he thought the effort should be to raise MOH salaries to approximate CCH levels. Given recent MOH budget cuts, it is difficult to envisage how this idea could go forward, no matter how laudable. The team repeats: for the future of the new project, it is essential that the salary issue be clearly settled from the outset of the new project, and that PRODESCO salaries reflect remuneration levels in the MOH/ local market.

As the team was leaving Bolivia, it became aware of a document polling all the PROCOSI members on the salaries the PROCOSI network is paying to its employees. The PROCOSI information could be used to determine what fair remuneration is at the Executive Director and senior staff levels, and the rest of the salary structure could be "retro-fitted" to the salaries of the senior team.

The Evaluation Team recommends that a salary commission be established to determine the level of remuneration for the senior PRODESCO team. A four member salary commission should be established composed of a representative of Price Waterhouse (or another labor market consulting firm), a representative of the MOH, a senior representative of PROCOSI and a senior representative of ProSalud (whose salary structure and policy do, indeed, reflect salary levels in the MOH.) For obvious reasons, no one from CCH should participate. The purpose of the commission would be to (1) develop a fair and equitable salary structure and (2) define a salary policy which will not distort the market as the CCH structure did, while at the same time providing a broad consensus on what level of remuneration will be required to attract competent local staff.

8.3 Proposed New Project Goals and Project Purpose

The project goal of CCH has been carefully worked out and tested over time; it also fits within the Strategic Objective formulation of USAID. The ET sees no need to change it. It should remain: "to improve the health of the Bolivian population."

Similarly, the project purposes do not need modification, and fit within the intermediate results package of USAID:

Improved child survival, reproductive and sexual health practices

Improved quality and increased coverage of community health care by local governments

Decentralized and participatory health care systems.

8.4 Proposed New Project Strategies

The Team proposes that Project strategies will be considerably different.

The first strategy will continue to be that of "community participation", except that in PRODESCO this will be an aggressively pursued strategy rather than simply a throw-away line.

The second strategy will be that of Decentralization. This strategy will be pursued both in the operational tasks that the PRODESCO team undertakes in the districts, municipalities and health posts, and it will be reflected in the decentralized structure of project staffing.

A third strategy will be to foster municipality buy-in, thereby aiming at eventual sustainability. As in "community participation", the ET proposes that PRODESCO pursues financial and programmatic sustainability in real terms not just in semantics.

To that end, the team is recommending that PRODESCO's involvement with any one municipality be no more than five years and that the fifth year of project activities be a year of consolidation rather than the introduction of new add-ons. It has become clear in CCH that if

project staff are not forced to confront the issue of sustainability, the issue will not be addressed: there are too many vested interests in project staff — and in the municipalities— for this to happen by itself. Thus, project designers must build in a forced phase-out in order to stimulate sustainability.

8.5 Proposed New Project Activities

Many project activities will remain largely unchanged (reflecting, among other things, the team's appreciation that at the district level, the current project has been achieving valid goals.) We think that PRODESCO should spend a lot of time in preparing course work to upgrade skills of the nurse auxiliars and community promoters. Also, significant time will be spent with MOH district staff, upgrading management skills, serving as interface between MOH and municipal leaders, coordinating outreach and community development activities, etc. As noted elsewhere, we believe that there is an important role here to upgrade MOH medical skills: working with doctors and nurses in providing better medicine to patients, and concerning themselves with working on more culturally sensitive procedures.

The team proposes that in the project write-up, input be solicited from current CCH departmental teams to flesh out the day-to-day activities that constitute CCH's current project load.

8.6 Proposed New Technical Areas

The Evaluation team proposes that the technical areas for which PRODESCO should assume responsibility should be increased to represent (as much as possible) the full range of medical services required by the rural population. It appears to us that all activities and focus of the AEIPI program should be retained: integrated attention to the child, including full vaccination regimes, etc. This is a continuation of activities as in the present project.

Based on field interviews, the team recommends that PRODESCO move vigorously into Reproductive Health and Family Planning. We recognize that this will add a layer of considerable programming complexity. Nevertheless, the demand is vast, as is the need.

The third technical addition is related to the second, a re-invigorated focus on maternal health. Mention has been made above that maternal mortality figures have remained largely unchanged over the last decade, at 390, in spite of considerable reductions in the rates of childhood mortality. The ET recommends that PRODESCO adopt a series of activities that will vigorously pursue reductions in maternal mortality in project areas over the life of the five year grant.

The fourth area of technical focus should be business management and training. This applies equally to MOH staff in the hospitals and health posts as it does to the municipalities. There is a crying need in the decentralized system for training in management principles, and PRODESCO's focusing attention on the decentralized level is in a position to respond to this need.

The next area that the project should undertake is that of water programming. The Evaluation team envisages that the role of PRODESCO in this area would be in the "pre-investment" stage. There are several large donors in country willing and able to finance the "hardware" of water system construction: pipe, cement, etc. Accessing such financing requires fairly sophisticated project proposals, including accurate engineering studies, appropriate importance given to community participation and the obligations of the water committees, etc. It was reported that Catholic Relief Services has a successfully functioning project which assists communities with the project proposal write-up. It is even possible that PRODESCO could interface with CRS and form a joint project in this regard.

The next new area that the project should undertake is that of preparing a response to the infectious diseases problems in project areas. As noted, Chagas, malaria and tuberculosis are grave problems in some project areas. Financial opportunities from USAID/W seem to becoming available for such activities, and the project should avail of this "window of opportunity."

The new project should continue to have strong element of capacity building. This should focus on personnel of the health improvement process most likely to yield impact on the critical health problems of rural communities, especially district and municipal authorities, auxiliars and community organizations. The new project should develop a systematic approach it will apply at these levels. The new project should continue to provide support for key operational and activity costs, such as formation and meetings of local health analysis committees. However,

avoiding long-term dependency will require institutionalizing these activities within the municipal health sector and passing these operational costs over the life of the project.

8.7 Geographical Concentration

Taking into account the geographical coverage of the current project which the team judges unmanageable, and the considerable additional programming complexity that it is recommending, the evaluation team is firmly convinced that the project should work in fewer areas than the 11 districts that CCH works in: there is simply too much area to cover. Accordingly, the team is recommending that the project either; (1) scale back at the very least to three districts per department, and preferably to two; or (2) scale back to two departments. The team observes (somewhat arbitrarily) that the maximum number of districts that PRODESCO should work in is seven or eight.

"Geographical contiguity" has been mentioned from time to time. The issue is that instead of being spread out for hundreds of thousands of square kilometers, it might be more useful for the project to concentrate in one or two geographic areas. As noted above, based on the criterion of acute poverty, there is some justification to remain in the areas of Altiplano Valle Norte, near the Peruvian border, and Capinota. Whether appropriate geographical "contiguity" can be achieved starting from that basis is a subject to be analyzed by the PRODESCO proposal write-up team.

Finally, the team recommends that priority be given to PRODESCO's working in project areas where the MOH is not competing with other health service providers. This is a concept well articulated in the Ministry's Strategic Plan discussion of "multiple service providers," that the MOH is now open to recognizing that other actors, churches or NGOs who are well established in some areas, have a meaningful role in substituting for MOH service delivery.

8.8 Recommended Ministry of Health Contribution

In order for PRODESCO to be implemented successfully, the Ministry of Health will have to come up with a number of key inputs. As noted above, some of them have already been clearly identified and fit within the Strategic Plan of the current Minister. Others will require additional commitments. According to the Evaluation Team, essential conditions are the following:

- The Ministry should commit to filling all unfilled MOH slots at the district and health post levels in PRODESCO areas within a specified time period. It will be impossible for PRODESCO to strengthen the MOH if the staff are not there. This will likely require addition resource allocations within the MOH departmental budget. The ET notes that this recommendation also figured prominently in the Mid-term evaluation and that the Ministry has proven unable to fulfill its commitment in this regard. Some more meaningful "teeth" will have to be put into this recommendation for it to be achieved.

- For reasons amply documented earlier, Año de Provincia physicians should not be assigned in PRODESCO areas. Instead, the Ministry should make the commitment, as called for in the P.E.S., to hire "medicos familiares" in these project areas. This, too, will likely require additional resources. The Evaluation team had recommended that the term of services for these doctors be three years, and was pleased to hear the Minister voice the opinion that the service should be three or four years.

- The MOH should commit to studying on a pilot basis, the establishment of a "career ladder" for nurse auxiliars in PRODESCO project areas.

- Finally, the team reiterates the idea that priority be given to PRODESCO's working in project areas where the MOH is not competing with other health service providers.

8.9 Roles and Functions

The team recommends that the role of the Executive Director should be as follows: (though as we have seen, not every candidate fulfills all the roles): to provide leadership and vision to the project; to create a climate of innovation and a culture of service; to liaise with the Ministry of Health and keep the project up-to-date on developments in the MOH, and the MOH up-to-date on happenings in the project; to provide direction and boundaries to project staff; to empower subordinate staff in a decentralized model; and to interface with USAID.

The roles of the Assistant Directors should be to provide technical assistance, guidance and orientation to the Regional Directors; to provide oversight and leadership in technical areas; and to ensure that adequate cross-fertilization and cross-departmental learning takes place. The Assistant Director for Programs will have overall responsibility for the technical/medical aspects of the project; the Controller will exercise oversight of the departmental accounting staff who will have actual responsibility for the day-to-day financial operations of the project; and the Assistant Director Evaluation/ MIS will have oversight of the management information system and the assessment of the impact of project interventions.

Functions of the Assistant Directors should be the following: providing technical input to USAID and the MOH for national-level policy and norm-setting processes; assisting in defining and managing commodity or other USAID inputs into national programs; providing administrative and financial management support (not control) to the project as a whole; aggregating project management and health information for management, evaluation, policy and reporting purposes; providing technical inputs to project activities at the department and district levels, including technical analysis and quality control of project activities; supporting collaborative definition of strategies, models, interventions and program elements; helping operational levels in adapting and applying new national norms and state-of-the-art approaches; serving as the coordination point for inputs from USAID central projects providing specialized technical expertise; assisting in the design, implementation and analysis of operations and evaluation research to support innovative approaches.

At the departmental level, the team is recommending a change of title, from "head" of the regional team to "Regional Director." The change is a deliberate effort to reinforce the concept that line responsibility in PRODESCO will reside at the regional/ departmental level. In fact, the evaluation team envisages that a macro-level contract will be signed with the MOH at the central level, and that several implementation contracts will be signed at the Departmental level. Each Regional Director will be fully responsible (within project norms) for his/her operations: for staffing decisions, budget preparation, all aspects of project implementation, reporting, liaison with the Departmental MOH staff. Naturally, this individual will also be responsible for supervising the departmental team under his/her supervision. It should be pointed out that there are a numerous examples where this decentralized system is functioning to satisfaction in Bolivia, among them, ProSalud, PLAN International and numerous local-level NGOs.

The regional technical team should be responsible for the implementation of project activities at the district and municipal level. The regional educator should be responsible for planning and assisting in the implementation of a vast array of training courses for the nurse auxiliars and community health promoters in health subjects, and for the management and administrative training for municipal and MOH field staff. The regional administrator should be responsible for all aspects of financial management: regional budget preparation, local bank account control, monthly budget control and reporting, check writing, etc. The regional MIS individual should be responsible for the quality and integrity of the health management system, oversight, control of data, and effective use of the information by the district PRODESCO team and the district *CAIs*.

If it is decided to hire a regional nutritionist, this individual would be responsible for integrating nutrition themes into the course work, and into PRODESCO in general.

The role of the municipal educators should be to liaise with the MOH physicians and nurse auxiliars on a day-to-day basis: helping them to understand the importance of community outreach, plan community activities; inculcate in them cultural and gender sensitivity; oversee the quality of attention given to the public; carry out local level course work on important health themes; liaise with municipal authorities, including the mayor and the municipal health committee; travel to outlying communities in the company of MOH staff and on his/her own; creating demand for better health services. Some have argued (correctly) that many of these responsibilities are functions of the current MOH nurse auxiliars. The evaluators respond that these functions are not being filled by the MOH. The over-riding purpose of assigning staff to these functions is to show municipal authorities that there is a need for such community promotion, to create more community demand for better health and provide a "boost" to current MOH staff to expand their service orientation into public health. The desired outcome is that municipality will see the need to finance such services at the closure of the project. Such sustainability could take place in at least three ways: (1) either by having the municipality continue health educators on its payroll after PRODESCO has withdrawn from the area; (2) by creating a position of municipal educator paid for on the municipal payroll who would have health responsibilities in addition to other responsibilities; (3) or by having the municipality pay nurse auxiliar and other MOH staff an additional stipend to engage in such community outreach.

Suggested functions at this level should include the following: providing technical, material, and financial inputs to support key training activities; increasing the emphasis on relating public health services to municipal investments and community and household interventions; working with *sindicatos* and other community organizations; increasing the use of community level approaches to delivering key services and information; mobilizing resources for community-based approaches; strengthening quality control of community-based services; applying approaches to monitor and improve access, use and quality of health services; in partnership with the department and central levels of the MOH at the district and municipal level, identifying, implementing and evaluating elements of district, municipal and community level approaches for replication in other sites. The new project proposal will be able to spell out more of these functions and relationships.

APPPENDIX B

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APPENDIX C

List of Contacts

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SACOA
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Armando Terrazas

AIDS Santa Cruz Activity
Lorgio Rudy Aguilera

APPENDIX D

Profile of the Evaluation Team

Frank Sullivan, M.P.S., Team Leader

Frank Sullivan worked for CARE for nearly 25 years, first in Bangladesh as cooperative development advisor and later as agricultural project development officer. With CARE Honduras, he served as fishing project coordinator and port officer. Leaving Honduras, he pursued a master's of professional studies degree at Cornell University with a specialization in agricultural and rural development. Upon completing his degree, he returned to CARE in Bangladesh and served in several positions: first as assistant country director for programming, then assistant country director for administration, finally acting country director.

Mr. Sullivan was transferred to Ecuador as country director, where he diversified the CARE portfolio to include activities in primary health care, water system construction, micro-enterprise, sprinkler irrigation, and soil conservation. He was transferred to CARE Bolivia where under his supervision the portfolio doubled to over $6.3 million annually. Notable program accomplishments during these five years were the bringing to fruition of a $11.0 million USAID OPG in primary health care/rural development and water systems in 160 rural communities, the landing of a $4.5 million grant from the Canadian government for similar activities in 60 rural communities, and the landing of two different $5 million grants from the governments of the Netherlands and Denmark for soil conservation and agricultural development. On his transfer to CARE in the Dominican Republic, he assumed oversight for a Title II primary health care project working in every health district on the Haitian/Dominican border. During this tenure, a unique impact evaluation was conducted on the project that demonstrated with high levels of statistical significance that the project had achieved major increases in breastfeeding and family planning usage, and reduction in infant and child malnutrition.

Mr. Sullivan has spent much of the last 10 years studying organizational behavior and is an independent consultant in that specialization along with skills in evaluation and health, water and agricultural development. His most recent consultancies were with the District of Columbia Department of Health as environmental health team leader of the "Management Reform Project" and with Save the Children.

Gisèle Maynard-Tucker, Ph.D.

Dr. Maynard-Tucker is a medical anthropologist and a freelance international consultant, and is an associate with the Pacific Institute for Women's Health and International Health and Development Associates.

Dr. Maynard-Tucker has worked on women's reproductive health and child survival issues in developing countries for the past 10 years. She has conducted research and evaluation of health programs on family planning, maternal and child health, micronutrient interventions, reproductive health, and AIDS prevention in Cameroon, Benin, Indonesia, Madagascar, Malawi, Morocco, Nepal, Peru, and Senegal. She has served as a consultant for USAID, The World Bank, The European Union, The World Health Organization, and The Asia Foundation.

Dr. Maynard-Tucker's work has been published in *Studies in Family Planning*, Working Papers on Women in International Development, *Health Policy and Planning*, *Social Science and Medicine*, and *The Journal of Tropical Pediatrics*.

Dr. Maynard-Tucker has spent much of the last 10 years studying behavioral change, cultural barriers to family planning, parents' management of children's illnesses, and the problems associated with poor quality of care of the services. She also has taught and trained numerous bilingual facilitators in conducting focus group discussions and in research methods.

Jorge E. Crisosto Greisse, M.D., M.P.H.

Dr. Crisosto is a medical doctor. He has a masters in public health, and has graduated in a mother/child nutrition post-graduate course sponsored by the ORSTOM Institute (France). Dr. Crisosto is currently employed at Catholic Relief Services (United States Catholic Conference). He has been a health project manager in the Bolivia program since 1994, and under his supervision the portfolio doubled to over $700,000 annually in primary health care.

He was chief of the National Health Department for five years in Bolivian Caritas. Dr. Crisosto designed and coordinated the implementation of a national survey of health resources and diagnostic services of the Catholic Church in Bolivia. He participated in the Interagency Cooperation Committee for the MOH National Immunization Program, and served as Church representative to the National Monitoring Committee for the Eradication of Poliomyelitis, and designed the Program on Adolescent Sexuality for the school system. Under his supervision, the portfolio doubled to over $500,000 annually in primary health care and emergency programs.

Dr. Crisosto developed the Caritas alternative community nutrition program and emergency programs in cholera, malaria and leishmaniasis, and represented Bolivian Caritas in the Assembly and Rotating Executive Committee of PROCOSI. He designed the content of the AIDS program, and served as attending physician for HIV and AIDS cases within the Caritas program. He is a member of the Medical Advisory Committee for AIDS.

Dr. Crisosto has participated in the design of the Bylaws, Statements, and Project Paper of PROCOSI (including PROCOSI OPG I and OPG II).

Dr. Crisosto has worked for the United Nations for five years. He was the coordinator of the resettlement program for Guatemalan refugees in Bolivia. From 1980 to 1983, he worked in the Emergency Central Post of Santiago in a Emergency and Disaster Team.

His most recent consultancies were with the Bernard van Leer Foundation (Holland) as an environmental health team leader of the Rural Initial Education Project of the Peruvian Education Minister.

Dr. Crisosto is a member of the Medical Association of Chile and Bolivia. Furthermore, he is a member of the International Union for Training and Education in Health, the South American Consortium on AIDS, and the Cientifical Bolivian Society on AIDS. Currently, he is a member of the Editorial Committee of *J&G* magazine.

Alfred Bartlett, M.D., M.P.H.

Dr. Alfred Bartlett is a pediatrician and epidemiologist, presently working for the U.S. Centers for Disease Control and Prevention. Since December 1991, he has been detailed to the USAID Global Bureau, Office of Health and Nutrition (OHN), where he presently serves as Senior Technical Advisor for Child Survival. He is the project manager for the Basic Support for Institutionalizing Child Survival (BASICS) project, USAID's global "flagship" project providing technical assistance and support to child health programs in over 40 countries (including Bolivia). He is also the coordinator of OHN's "Strategic Objective 3" (child health and nutrition), leading strategic planning and coordination of efforts in this area. Prior to his work with CDC and USAID, Dr. Bartlett was a member of the faculty of the Department of International Health of the Johns Hopkins School of Hygiene and Public Health; during 1986-1991, he lived and worked in Guatemala, carrying out community-based research and program development in diarrheal diseases and maternal and neonatal health. Prior to coming to USAID, he was the author of over 35 articles in the peer-reviewed health research literature, and of numerous abstracts and presentations on international and U.S. child health.

APPENDIX E

Evaluation Schedule

10-11 Mar., 1998 Team planning meeting

12 Mar. Interviews with USAID and Washington, D.C. Cooperating Agencies

13 Mar. Team travel to Bolivia (three expatriate members)

15 Mar. Full team meeting

16 Mar. Introductory presentation to USAID/B

17 Mar. Full-day presentation to Team by CCH project staff

18 Mar. Full team field travel to Patacamaya

	Team One	Team Two
19 Mar.	La Paz interviews	Travel to Los Yungas
20 Mar.	La Paz interviews	Travel to Chulumani
23 Mar.	La Paz interviews	Travel to Villaroel
24 Mar.	La Paz interviews	Note write-up

25 Mar. Departure of one team member (Dr. Al Bartlett)
Field travel of one team to Santa Cruz, and one team to Cochabamba

	Santa Cruz Team Visits	Cochabamba Team Visits
25 Mar..	CCH office presentation	UDES visit, Colomi
26 Mar.	4 Cañadas, San Julian	Totora, Moyapampa, Epizana
27 Mar.	San Javier, San Ramon	Pocona
28 Mar.	El Puente, 4 Cañadas	(Rest)
29 Mar.	(Rest)	Ivirgazama, Pto. Villaroes, Valle Hermosa

30 Mar.	Samaipata	V. Tunari, Samuzbeth, Jatun Pampa
31 Mar	Valle Grande	Capinota, Pongo
1 Apr.	Return to La Paz	Office presentation/Return to La Paz

2 Apr.	Team meeting/Note sharing
3 Apr.	Team meeting/Note sharing
4 Apr.	Team meeting
6 Apr.	In-country report writing
7 Apr.	In-country report writing
8 Apr.	Debriefing to USAID Debriefing workshop with CCH staff Debriefing with Minister of Health
9 Apr.	Debriefing with USAID project manager
10-11 Apr.	Departure of expatriate team members
14-17 Apr.	Report write-up
20-25 Apr.	Report write-up
27 Apr.	Submission of first draft to POPTECH

APPENDIX F

Findings from Field Trips to the Altiplano, Las Yungas, and Santa Cruz

The following data were collected during focus group discussions, interviews, and observations conducted in health facilities in Patacamaya, Buruta, and Unupata for the Altiplano; Chullumani, Tajma, and Yanacachi for Las Yungas; and San Julian, San Javier, San Ramon, El Puente, Samaipata, and Vallegrande for Santa Cruz. A total of 109 persons were interviewed: 48 women and 61 medical staff.

This section reports opinions expressed by auxiliars, nurse educators, promoters, and beneficiaries who frequent the health facilities that received financial aid from CCH.

General Findings

Auxiliars were in agreement regarding CCH's positive impact on the development of health services in the communities and felt that the project has strengthened the coordination and collaboration between the health centers, the districts, and the municipalities. They also reported that the communities that benefited from CCH water and sanitation are more progressive than the others. One nurse/educator said "the project is very positive because it has permitted to coordinate and organize health centers and to coordinate activities at the level of the district and the municipality in addition to getting material and equipment very much needed."

Auxiliars' Work

Auxiliars' work is very flexible and is adapted to the life of the communities. For instance, they work from six o'clock to eight o'clock in the morning, visiting houses in the community before the families leave for the fields. They also work from six o'clock to ten o'clock in the evening, attending the health post or working on Sundays depending on the seasons. Each one has from 15 to 40 communities to visit; because of the geographical spread of the communities, their work involves traveling on dirt roads or facing the elements during the rainy season when the roads are impassable.

Training

Auxiliars who attended the CCH-sponsored training, "Atencion Integral de Enfermedades Prevalentes de la Infancia" (AIEPI), thought it was very beneficial because it included a practical component that was taught in a hospital setting with medical examination of children

experiencing serious cases of ARI (acute respiratory infection). Most of them felt that CCH training was beneficial, although there were some constraints.

One complaint was that not everyone was trained, and sometimes the same person attended all the training since the selection of the persons to attend the training is done at the district level and is sometimes politically influenced. In addition trained personnel were not interested in passing on their knowledge. Another criticism was that training was not followed up with refresher courses. One informant said, "CCH has helped in the training of the personnel; however, the technical part has suffered from a lack of follow-up and they have no results."

Information, Education, and Communication (IEC)

It was reported in Samaipata and Las Yungas that the dissemination of radio spots for the treatment of ARI and diarrhea was positive because more women brought their children to the health facilities as a result of this promotion. However, dissemination of the radio spots was hindered by financial and administrative problems at the central office, and the campaign was stopped about three months ago in some districts.

On the other hand, auxiliars reported that the promotion of health education in communities is ignored or is criticized by the population as "boring." Auxiliars mentioned that there is a major need to change IEC strategies and to produce more dynamic and visual IEC such as videos, telenovelas, plays, and songs. In addition, some materials should be adapted to the Aymara and Quechua languages. Likewise, promoters reported that they do not have IEC materials for the promotion of family planning. Commenting about the lack of IEC strategy for family planning, one auxiliary mentioned "at the level of the auxiliars there is a need to elaborate a work methodology, to identify problems of each zone and to organize an education strategy with various groups churches, nuns, adolescents, and prostitutes."

Supervision/Evaluation

In the Altiplano, supervision of the auxiliars is performed by two nurse educators. This involves 109 communities and the supervision of 120 promoters. Some of those communities are far away and difficult to access because of dirt roads and flooding during the rainy season. Supervision protocol calls for a supervisory visit at least three times a year; however, because of logistical difficulties, the visits only take place once a year. In addition, no formal supervision of promoters' work is provided. One educator said "results are not analyzed, evaluation and supervision of the personnel's work is lacking."

Sub-system National De Informacion De Salud (SNIS)

Medical personnel agreed that the SNIS was a positive improvement and has given them an overview of project activities. One informant said "SNIS is the thermometer of our activities and helps improve our services." However, auxiliars' major complaints about the system were the many forms required to collect data and the long hours spent filling out the forms. They also felt that the SNIS does not show all the activities; therefore, it would be difficult to evaluate their work and the work of the medical personnel based only on these data. Family planning data do not show the drop-outs; therefore, program effectiveness cannot be evaluated.

Village Promoters (Volunteer)

In some regions, promoters received training from the MOH and CCH last year. The courses included family planning, treatment of diarrhea, and delivery. The promoters' task is to educate the population about ORT, ARIs, the prevention of malaria and leishmaniasis. They also immunize the children, do prenatal control, and attend births. In cases of serious illness, they refer patients to the health facilities. They prescribe essential drugs and promote FP (condoms, IUD, pill, and the rhythm method). Their work is generally voluntary; however, in Samaipata one incentive is that promoters get free medical consultation for themselves and their family.

Promoters reported that their job is very difficult because of the high degree of illiteracy of the population. They mentioned that they have a hard time motivating the population about hygiene and sanitation. Some communities have latrines but people do not use them. They feel that they need educational material more adapted to cultural norms and the illiteracy of the population. In Tajma, two promoters have a knowledge of plants and use both herbal teas and skin creams, which they manufacture along with essential drugs, to treat their patients. Most of the population consult the promoters instead of walking to the hospital, which is 45 minutes away by car.

Reproductive Health

Auxiliars reported that they need more training for the promotion of reproductive health and family planning. In the Altiplano, the rhythm method is taught. These women do not understand female physiology and, because of cultural beliefs regarding women's ovulation period that is believed to happen during menstruation, many practice the rhythm backwards. Auxiliars think that they need more knowledge and training in reproductive health services, delivery, and complications from abortions. Auxiliars mentioned that they do not know enough about the diagnosis and treatment of STDs even though they have to treat patients afflicted by these pathologies. They reported that IEC messages about FP do not reach the population because they do not have a specific methodology to pass on the messages.

Quality of Care

In a rural community, if a woman wishes to go to a health facility and if she has the means of transportation, she will encounter problems. Women reported that they must wait long hours for a consultation with the doctor. There is no possibility to establish a trusting relationship with the doctor, who is usually new because of the transfer imposed upon the medical personnel. In addition, women complain that during the consultation (usually very rapid), doctors do not explain the illness or try to reassure the patient. In some situations when the doctor speaks only Spanish and the patient speaks Aymara/Quechua, there is even less communication. Sometimes the lack of cleanliness is commented on by the medical personnel, whose lack of sensitivity about cultural norms associated with nudity and privacy discourages patients from using the health services.

Delivery

During interviews a small group of women reported giving birth by themselves. Several women said that they gave birth in a field and had to break a bottle to cut the umbilical cord. One woman explained that she walked home carrying the child wrapped in her sweater. Another women said that she has given birth twice by herself and has developed a methodology (she prepares her teas and her soup and disinfects the scissors). A young women said that she had given birth by herself but the child died during the delivery.

In a hospital setting, the mother is usually alone with the medical personnel. She is asked to take off her clothes and to show her genitals to the male doctor and the nurses. The delivery room is not private, and in most cases the woman has to deliver her baby on the gynecological table, although in some facilities new regulations let the women deliver in the position they prefer. However, the setting is highly impersonal and without privacy. After the birth, the woman is put in a room alone or with strangers. Because of hospital regulations, she is generally not given any food until the feeding schedule of the hospitals. Women complained that they do not get their traditional soup, nor are they able to be with their friends because hospitals regulate the visits.

Alcalde (Mayor)

Most medical personnel agreed that there is better collaboration with the alcaldes and the municipalities since the movement of decentralization. However, in some instances the medical personnel complained that the alcaldes were not keeping up with their funding agreement, that is, the funding of some equipment, food for some hospitals, uniforms, and furnishing along with renovation of the infrastructure. Overall, communities in which alcaldes are involved in supporting health education and promotion and curative services offer much better services to the population.

Beneficiaries

Women interviewed thought that organized women's groups was an appropriate way to promote health education and to increase the community's responsibility about health needs. Women knew about ORT but seldom used it. They explained that when children are sick, they medicate with herbal teas and massage the child's chest with herbal concoctions. They also mentioned that they buy drugs from retailers at fairs. They buy mostly antipyretics, analgesics, and antibiotics in suppositories, syrups, and pills. They said that some drug sellers are ex-promoters and give instruction about the dosage of the drug. In cases of serious ARIs, they said that the signs are unwillingness to breastfeed, high temperature, fast respiration, and sweating. Many said that in the past they went to work the fields although they knew that the child was seriously ill and should have been home.

Women reported that husbands are asked to give their permission when a woman wants to use a contraceptive. Within the family, men are the decision makers and influence their wives about the use of contraceptive methods and the use of health facilities for birth delivery. However, most men have only a superficial knowledge of contraceptives and do not like male doctors attending their wives' deliveries.

In the Altiplano, women who belong to the group "warmi" meet once a month or more depending on the seasons to discuss their health problems with the promoter. During one of these meetings they perceived that their major health problems were the numerous deaths that occur during child birth and children's malnutrition.

During the discussion inquiring about their opinions about the methodology of "warmi," women said that health education was taught too fast and they could not remember what was said. Most of them had forgotten about the treatment of diarrhea, ORS, ARIs, and nutritional tips. On the other hand, they knew the contraceptive methods but were ambivalent about using a method even though they did not want any more pregnancies.

Recommendations

Because of lack of access to health facilities in dispersed rural communities, new outreach strategies for health delivery should be considered, such as a mobile team reaching the community and during fiestas. In addition, medical training of auxiliars, promoters, and midwives regarding diagnosis and treatment should be strengthened and expanded.

The new project should reinforce the development of women's groups, warmi, mother's clubs, and others. During focus group discussions, women who belong to a group were more aware of health problems and wanted to learn more. It is important that these women learn the serious signs of diarrhea (blood) and of ARI (rapid respirations). Some women were "leaders" and could be trained to promote hygiene, health prevention, ORT, ARI, FP, and nutrition. The promotion could be done on market days. They could benefit from free medical consultation as incentives.

New IEC strategies could promote reproductive health and family planning using video films, plays, games, and songs in indigenous languages. Because women are undecided and afraid of the negative rumors regarding side effects of contraceptives, it is recommended that the woman who does the promotion be a user, and she should talk about her experience and the advantages of using a method.

Men should be educated by male promoters about the advantages of contraception. They should be warned about the danger of their wives giving birth without medical attention and the danger of getting STDs/SIDA. This could be done at community meetings.

It is important to establish a training protocol with refresher courses every four months the first year and every six months the second year. Medical training should include hands-on training in a health facility. Reproductive health and family planning training should be priorities. In addition to the training of *parteras* and promoters, there should be courses in supervision/capacitation for supervisors.

All medical personnel should be educated about the cultural norms and traditions of the Aymara and Quechua people and should be aware of their need for privacy and their shame about nudity. It is also important that they speak the indigenous languages.

Some female nurses could be trained in gynecology and birth complications (midwifery) to attend delivery and abortion complications. If the patient were willing, they could replace the doctor. Women should be able to give birth in the position they want and have their family bring the soup after the birth. However, doctors/auxiliars would have to develop a methodology to help the birth in these new positions.

It is recommended to develop a protocol of supervision for nurses, auxiliars, promoters, and *parteras*. The work of each one should be monitored every three months with appropriate forms.

Alcaldes and the health secretaries of the municipalities should be educated about responsible community health involvement and motivated to think about the sustainability of community health through workshops and seminars.

APPENDIX G

Cultural Context

Bolivia has two main ethnic groups, the Aymaras who account for 8 percent of the population and the Quechuas who represent 15 percent of the population (DHS). They live mainly in the Altiplano and the Valleys but frequently migrate to others parts of the country in search of agriculture work. During harvest season, some of the men migrate to Chile or Argentina for several months and sometimes establish another family during their migration. Others migrate with their families and often settle in the Lowlands. For the most part, the Aymara and Quechua women are monolingual in their native language, while some have a basic knowledge of Spanish. In their communities, they adhere to traditional practices and beliefs; their culture provides a wide network of relationship ties based on reciprocal obligations through the practice of *compadazco* (fictive kinship ties) and *ayni* (reciprocal labor obligations).

Both ethnic groups live from agriculture in dispersed rural communities, often isolated by lack of transportation, bad roads, and flooding during the rainy season. They produce potatoes, oats, beans, beets, and onions, and raise sheep, cows, llamas, and pigs. Most people live in compounds without running water or sanitation. Agriculture and herding are their ways of subsistence. Their agricultural work is very demanding because of the dependence on rainwater to irrigate the fields. Men and women work in the fields daily and rest on Sundays. Mothers usually take infants and toddlers to the fields and watch over them while working; older children are sometimes sent to school. In these patriarchal societies, men have the power of decision and women's role is subservient. Children are trained early to assume some of the daily chores: herding, fetching water, searching for wood, shopping, and caring for siblings. Health is important, but it is neglected because food production is the main preoccupation. In case of illness, *curanderos* (traditional healers) are available and are trusted because of their knowledge of plants and divination skills.

Health Seeking Behavior

Curanderos

In this fragile environment, food production is the main preoccupation and involves the whole family. Health problems are accepted as part of the living routine, and in time of crisis traditional house remedies are first administered and traditional healers are consulted. *Curanderos* are available at any time; they can be paid in produce or money; their treatment is holistic; and they use herbal teas, massages, and reassurance. They explain the causes of illnesses usually based on the "hot and cold" theory of opposition, which is easily understood by the patient. In addition, they can differentiate if the patient's illnesses is natural or supernatural (susto), a fright that causes (psychosomatic) illness, and treat them appropriately.

Parteras (Traditional Midwives)

Parteras are traditional midwives who often learn their trade through experience with relatives. They usually live in the community and are well known for their knowledge of plants remedies. Women prefer to give birth at home because they are usually attended by their husband, a midwife, and female relatives. During the birth, the woman keeps her clothes on and at no time does she show her genitals. It is believed that during delivery the uterus opens and cold enters or blood becomes cold. This is a dangerous period for the woman, because if she gets this "cold" in her uterus there is no cure.

The *partera* tightens the waistband so that the mother may deliver her infant lying down, kneeling, or sitting. The partera encourages the mother with kindness and massages her belly and gives her herbal teas to drink. She comforts the mother and gives her moral support. After the birth, she cuts the umbilical cord and washes the child with warm water. Breastfeeding is usually delayed for one day, and the child is given tea or bouillon. Then the *partera* or female relative prepares a *caldo* (a specific soup made out of chicken broth and potatoes) believed to strengthen the mother. The *partera* can be paid with gifts, produce, or money. The day of the birth is celebrated by inviting relatives living in the same community to a special meal prepared by a neighbor or female relative.

Children's Illnesses

Diarrhea

Children's illnesses and mortality are expected. Women said that if they have many children, some will survive; it is common practice to name a child after his second birthday, after he has survived the first years of his life. Within the context of both Aymara and Quechua cultures, illness is identified if one is not able to work a full day in the field, attend school, tend chores, and if infants refuse to breastfeed and do not stop crying. Some children's illnesses are expected and may be considered as "normal," that is expected during specific seasons. Women speak of the “diarrhea season” and do not associate the disease with water quality. Some mothers said that teething or a heat wave cause diarrhea. In the region of Santa Cruz, Murphy et al. (1997) identified three rural-based definitions of diarrhea, and each type was reported as having different causes and different food treatment. They reported that most episodes of diarrhea are treated at home or by *curanderos* with herbal teas. Oral rehydration was only applied in 16 percent of the households. Informants said that if the home remedies do not improve the condition within two to four days they seek a doctor.

Acute Respiratory Infection (ARI)

Women also expect children will have colds, flu, and bronchitis. They usually treat ARI with home remedies such as herbal teas, soups, and baths along with essential drugs and sometimes

antibiotics. Essential drugs or antibiotics are often bought on market day and kept for later use. Drug retailers on market day are not always trained about pharmaceuticals and often do not give any instructions about dosage or side effects. If the treatment fails, mothers consult the *curandero*. If the condition of the child worsens after the treatments, the mother seeks health care. During interviews, it was found that women find it difficult to decide when to bring the child to the health worker. Self-medication and *curandero* treatment delays the seeking of health care, sometimes for three to four days.

Male Migration

In Urupata, 57 families, a total of 157 inhabitants, live in this isolated locality of the Altiplano in the department of Villaroel. Seven women selected at random for a focus group reported an average of 7.5 children with 5.8 living children. The community is plagued by male migration to Chile and Argentina or other parts of the country. About three quarters of the men are absent for one to three months or a year. This affects women's work because they take over men's tasks in the fields and also have to herd animals in addition to taking care of the children and attending to household responsibilities. The community is located two hours by car from the nearest health center. CCH has recently established a health post in the community and furnished it with basic material. A promoter has the charge of the health post in addition to his community activities.

Family Planning

During the discussion, women reported that the health post was a great improvement; however, they knew that in case of a serious illness or an emergency, they were doomed to die because of the lack of transportation out of the community and because during the rainy season the roads are impassable. Women reported that they fear giving birth because of the high rate of maternal mortality associated with delivery and puerperium, yet none of them was practicing a FP method. Women knew of the methods but could not make a decision regarding which method to use, because they had heard negative rumors about the side effects of some of the methods. For example, the pill was associated with failure because one woman on the pill got pregnant, the IUD was associated with cancer of the uterus, and men usually did not want to wear a condom. In addition, some women said that they were ashamed to ask the male promoter for condoms because he was male. Some women had heard of the injection and said that they like that method, but they could not get it because they had to go to a pharmacy in town and the cost—Bs. 40-50—was too high.

Men's Decisions

In most of the health facilities, if a woman wants to use a contraceptive she must have the her husband’s authorization, especially for an IUD or a tubal ligation. Women reported that they must ask their husbands about the use of contraception and that it is the husband's decision. To

avoid having to get the husband's authorization, some women buy contraceptive injections from pharmacies and have themselves injected without medical control. Husbands also influence their wives against giving birth in an hospital, because they do not want a male doctor to attend them.

Abortion

Abortion is traditionally practiced with teas made out of Ruda and other plants that have the potential to contract the uterus. Now, a wide range of women also use modern drugs to induce abortions. Induced abortion is widely practiced and was reported by medical personnel as hemorrhages because pregnancy and delivery. It is estimated that for every nine births delivered in a health facility, there is one abortion (OMS, 1996). Abortions are induced by the women themselves (jumping with heavy loads); they are performed by private doctors and some private health providers; and some are performed by *parteras* or by lay persons. Although no empirical data are available on abortions, they are probably one of the main causes for maternal mortality. Health providers reported that every other day, women of all ages asked for abortions because of unwanted pregnancies.

ANALYSIS

Migration to more developed parts of the country is often met with prejudice and marginalization for the Aymaras and the Quechuas because of their low socioeconomic status, illiteracy, and adherence to traditions and beliefs. This migratory process has altered the ancestral traditions and beliefs somewhat, but the assimilation of new concepts about health accompanied by behavioral change is a long process and cannot be measured at the moment. During this transitional period, both health systems (traditional and Western) are used concurrently or separately depending on the type of illness.

In case of serious illness, a major constraint is the lack of transportation and, during the rainy season, impassable roads. Health facilities do not always offer an adequate quality of care. Often the personnel are monolingual in Spanish and do not understand indigenous languages. Moreover, doctors, nurses, and auxiliars do not give explanations about illness, and modern treatments focus mainly on stopping the symptoms. Futhermore, health facility personnel lack sensitivity about traditional customs and appearances and react with paternalistic attitudes and prejudices. The medical personnel who are modern and educated are not aware of the traditions and customs of the Aymaras and the Quechuas and confront them with hospital regulations and norms.

It is interesting to note that fees required in health facilities for consultation (Bs. 5) are minimal and the free hospitalization of women for delivery is not used to its potential: most health facilities visited had few patients. On the other hand, informants reported spending large sums of money for the services of *curanderos* (Bs 30) and *parteras* (Bs. 50-70) and for consulting private doctors who sell drugs. Delivery at a private clinic with a two days stay costs (Bs. 200). Private

doctors are preferred over the services of the public health facilities. Women said that private doctors have more experience, they treat their patients well, they communicate and explain the illness, and they can be trusted because they have an office in the community.

At the moment, the Aymaras and the Quechuas do not want to change their behavior because Western medicine does not offer any advantages in view of the poor access to health facilities and the deficient quality of the services. In some cases, men's authority also prevents women from regulating their fertility. Preventive modern medicine is difficult to understand in a setting in which life is measured day by day. Some women told the auxiliars that there was no reason to immunize their children because they had not been sick; other women said immunizations will leave them infertile. Women expect endemic illnesses like malaria, Chagas' disease, diarrhea, and ARI and take a fatalistic view toward their occurrence. Likewise prenatal consultations are not well understood because pregnancy and delivery are viewed as natural processes that each woman faces in her life time.

At the moment, people seek biomedicine only if all the other treatments have failed and the patient is in a very serious condition. This demonstrates that there should be more emphasis on health education in the future. Intensive education should bring about a change of concept and behavior, but this can only be successful if illiteracy decreases and if socioeconomic conditions improve. For the Ayamara or Quechua women it is difficult to opt for a change of behavior and a rejection of ancestral traditions in a precarious environment that requires all of their energy to survive and to reproduce.

APPENDIX H

Close-out/Downsizing Workshop

Under downsizing and re-engineering, senior management faces the dilemma of trying to do more with less, and recovering the esprit de corps and organizational vitality of years past. This challenge is made all the more difficult in light of fewer resources, human and financial, and the legacy of downsizing itself:

- An atmosphere of staff uncertainty as to where the axe may fall next;
- A sense of "victim-hood";
- Frustration and sadness that "the good old days" are gone; and
- Sometimes disguised, sometime overt, staff disgruntlement at senior management for having "caused" the problem;

Moreover, explicitly or not, the "old psychological labor contract" that guaranteed lifetime employment to loyal employees has disappeared, and the new psychological contract is not yet in place. Such a labor contract will likely presume the right of the employer to release staff without prejudice when business conditions require it, as well as the employer's obligation to provide as much job enrichment and future "employability" as possible. On the employee side, higher-than-ever commitment and creativity will become the norm, as well as the principle reason for continued employment. A draft workshop outline follows to discuss these ideas:

Day One: "Personal Elements in Downsizing"

AM 1	Workshop Objectives, Methodology, and Expectations
AM 2	Personal Experiences
PM 1	Personal Experiences
PM 2	Literature Review of Downsizing
Evening	Video on Confronting Life's Challenges

Day Two: "Institutional Elements in Downsizing"

AM 1	Visualization: Effects of Downsizing on a Latin Family
AM 2	"On Death and Dying"/Elizabeth Kubler Ross and Downsizing
PM	The Four Levels of the Downsizing Process

Day Three: "Personal Reorientation viz-a-viz Downsizing"

AM	The First Two "Habits" of Stephen Covey and Downsizing
PM 1	The Third "Habit" of Stephen Covey
PM 2	Managing Transitions (William Bridges)
Evening:	The New Curriculum Vitae

Day Four: "Institutional Reorientation viz-a-viz Downsizing"

AM 1	Adaptation to "The New Labor Contract"
AM 2	Values/Mission/Vision
PM	Celebration of Successes

Day Five: "Facing the New Challenges"

AM 1	Facing Great Changes
AM 2	Personal Goal Setting— 6 and 18 months
PM	Evaluation and Workshop Closure